



Aalto University
School of Business

PARTNER ECOSYSTEMS IN ENTERPRISE SOFTWARE

Cause and effect of the business model from
vendor, partner and customer perspectives

Master's Thesis

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28 April 2017

*Information and
Service Economy*

Approved in the Department of Information and Service Economy

___ / ___ / 20___ and awarded the grade

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Title of thesis PARTNER ECOSYSTEMS IN ENTERPRISE SOFTWARE

Cause and effect of the business model from vendor, partner and customer perspectives

Degree Master of Science in Economics and Business Administration

Degree programme Information and Service Economy

Thesis advisor(s) Matti Rossi

Year of approval 2017

Number of pages 83 **Language** English

ABSTRACT

*“A **Software Ecosystem**” is an economic ecosystem that forms around one specific software vendor. As the software industry changes rapidly, research presented earlier shows, that the success of a software is not only defined by its own success but by the success of its ecosystem.”* (Popp & Meyer, 2010, s. 131) In most cases, a software ecosystem formulates over time around one large, global organization. The vendor enables other companies to engage in co-operation with it, resell its product portfolio to customers or complement their own offerings with the organization's product or service portfolio. In large software ecosystems, there are multiple types of third-party organizations engaging the vendor and acting between it and the end customers. Different types of third party organizations aim to bring value to the ecosystem in different ways, according to business strategies they have chosen. The most common types of third party entities in enterprise software ecosystems are Value-added resellers (VARs), Value-added distributors (VADs), System Integrators (SIs) and independent technology consultants.

The purpose of the ecosystem is to act as an environment that enables all parties in the ecosystem to benefit from each other's existence and create value that could not be captured as efficiently, if at all, without the ecosystem and the external entities as parts of it. The most common goals the software vendors pursue with the ecosystem strategy can be further subcategorized into three main sub-goals; financial goals including cost-cutting and monetization, product leadership related goals through open co-innovation, and finally network effect related goals that can be achieved in the market. Although strategic partnerships complicate the business especially since the third parties might represent multiple competing technology vendors, they have been successfully utilized in almost every major industry, including enterprise software. In general, software ecosystems enable increasing value to existing end users, increasing attractiveness to new users, sharing the efforts of product innovation between the partners and increasing lock-in effect among the global clientele. Additionally, the partners enable physical presence in more local markets without expanding the vendor's own customer facing sales personnel to uncontrollable numbers.

Keywords software, vendor, ecosystem, business partner, value-added reseller, value-added distributor, channel sales, distribution, implementation, system integration, outsourcing, trinity

Tekijä Jussi Kaistinen

Työn nimi PARTNER ECOSYSTEMS IN ENTERPRISE SOFTWARE

Cause and effect of the business model from vendor, partner and customer perspectives

Tutkinto Kauppatieteiden Maisteri

Koulutusohjelma Tieto- ja Palvelutalous

Työn ohjaaja(t) Matti Rossi

Hyväksymisvuosi 2017

Sivumäärä 83

Kieli Englanti

TIIVISTELMÄ

“Ohjelmistoekosysteemi” on kaupallinen ekosysteemi, joka muodostuu yhden ohjelmistoyrityksen ympärille. Aiemmat tutkimukset ovat osoittaneet, että nopeasti muuttuvalla ohjelmistotoimialalla menestys määrittyy usein koko ekosysteemin menestyksen perusteella, eikä vain pelkän ekosysteemin omistajan menestyksen perusteella.” (Popp & Meyer, 2010, s. 131) Useimmissa tapauksissa ohjelmistoekosysteemi muodostuu ajan myötä suuren, globaalin yrityksen ympärille. Ekosysteemin omistaja mahdollistaa muiden yritysten aloittavan yhteistyön kanssaan kumppanisopimuksen kautta, johon voi kuulua esimerkiksi jälleenmyynti tai ekosysteemin omistajan tarjoaman täydennys omalla tarjoamallaan. Suurissa ohjelmistoekosysteemeissä on yleensä usean tyyppisiä kumppaniyrityksiä, jotka toimivat ekosysteemin omistajan ja loppuasiakkaan välillä erityyppisissä tehtävissä valitsemansa strategian mukaisesti. Yleisimmät kolmannen osapuolen kumppaniyrittäjätyypit ohjelmistoekosysteemeissä ovat lisäarvoa tarjoavat jälleenmyyjät (VARit), lisäarvoa tarjoavat jakelijat (VADit), systeemi-integraattorit (SIt) sekä itsenäiset teknologiakonsultit.

Ekosysteemin tarkoitus on luoda ympäristö, joka mahdollistaa kaikkien sen osapuolten hyötymisen tavoilla, jotka eivät olisi mahdollisia tai yhtä tehokkaita itsenäisille toimijoille. Ohjelmistotarjoajan näkökulmasta yleisimmät ekosysteemistrategian tavoitteet voidaan jakaa kolmeen osa-alueeseen; rahalliset tavoitteet, sisältäen kulujen ulkoistuksen sekä monetisaation, tuotejohtajuustavoitteet, joita tavoitellaan avoimen innovaation kautta, sekä kolmantena verkostopohjaiset tavoitteet, joissa markkinoilla pyritään parempaan lopputulokseen kumppaniverkoston avulla. Vaikka yritysten väliset kumppanuudet voivat monimutkaistaa liiketoimintaa, etenkin jos kilpailevat teknologiayritykset muodostavat kumppanuuden saman kolmannen osapuolen toimijan kanssa, on niitä hyödynnetty lähes kaikilla toimialoilla. Mukaan lukien yritysohjelmistoala. Yleisesti ohjelmistoekosysteemit mahdollistavat paremman lisäarvon luomisen nykyisille loppuasiakkaille, suuremman houkuttelevuuden potentiaalisille uusille asiakkaille, tuotekehitysponnisteluja jakamisen ja tiukemman asiakkaiden lukkiutumisen. Lisäksi, ekosysteemi mahdollistaa läsnäolon paikallisilla markkinoilla ympäri maailmaa ilman toimittajan oman sisäisen asiakas- ja myyntivastuussa olevan henkilöstömäärän lisäämistä hallitsemattomiin lukemiin.

Avainsanat ohjelmisto, toimittaja, ekosysteemi, ohjelmistoekosysteemi, kumppani, jälleenmyyntikumppani, tukkuri, kanava, jakelu, implementointi, systeemi-integraatio, ulkoistus, kolmikanta

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"You see there is only one constant. One universal. It is the only real truth: Causality. Action, reaction. Cause and effect."

- The Merovingian

1 Introduction

The literature review section of this M.Sc. thesis is based on my B.Sc. thesis with the title ***“STRATEGIC PARTNERSHIPS IN SOFTWARE SALES AND DISTRIBUTION: Leveraging channel sales in software ecosystems to major revenue driver”***. It is about enterprise software ecosystems and their implications to customers, as opposed to simplified environments where software vendors serve customers directly and no third parties are involved in the process. While my B.Sc. thesis mostly focused on selling through the ecosystem, the scope of this M.Sc. thesis is wider and it goes deeper into implications of the business model. Parts of the literature review that were still relevant are inherited from the B.Sc. thesis.

The scope of this thesis is to research both customer experience and implications to sales, distribution and services of software. Additionally, implications to other relevant areas of the business such as product development with multiple stakeholders in the ecosystem. The different parties in the ecosystem often have different agendas and priorities as well as initiatives and requests for limited resources of the vendor in areas such as product development. This creates a complex business environment with numerous different stakeholders, making the topic very interesting as clear rules of engagement often cannot be determined and human consideration usually plays a key part in the outcome.

The term “channel sales” is an industry developed term for selling and distributing software through one or several third-party companies that operate as parts of the software ecosystem. “Channel sales” is one of the key processes in the ecosystem and hence discussed largely throughout this thesis. Since “channel sales” is a sales and distribution strategy that can only be implemented after building a “software ecosystem” with several third-party entities around the core company, these terms are very closely tied to each other. My empirical section focuses on the ecosystem of one global, multinational technology company that has a very broad range of software solutions in its portfolio for multiple business purposes, industries and customer segments. They also have a global business partner ecosystem that operates as value-adding sales and distribution mechanism of their enterprise software solutions. They also have highly developed partner programs for managing the ecosystem, enabling selling and distribution of their software portfolio as well as rewarding the partners for value-adding achievements according to their reward policies. The research questions introduced in chapter 1.3 reveal what findings are pursued by the literature review and empirical research conducted for this thesis.

1.1 Motivation

My motivation towards this topic comes from both academic and real life experience. Back in 2013, my work revolved around this topic and I decided to write my bachelor's thesis about it. It was educational to combine my own experiences with literature about the topic. When I was thinking about my M.Sc. thesis topic, I felt that my B.Sc. thesis topic was worth researching a bit further. Therefore, I wanted to continue from where left off with the literature review in my B.Sc. thesis and extend it by conducting an empirical research by interviewing several experts of the business. Additionally, I had good connections in the business which made it was easy to organize six subject matter expert interviews from slightly different points of view, as their positions differed from each other, even though they were all part of the same global software ecosystem. Additionally, even my current job in a company very similar to my research target company, can be described as software sales through reseller and implementation partners, making it very interesting to me still for the years to come. The choice was clear.

1.2 Definitions

SOFTWARE APPLICATION

“Software application is a set of computer instructions that provide more specific functionality to a user. This functionality may be broad, such as general word processing, or narrow, such as an organization's payroll program. Essentially, an application program applies a computer to a certain need.”

(Rainer;Cegielski;Splettstoesser;& Sánchez-Rodríguez, 2014, s. 410)

In addition to end user focused software applications, also system software is required to act as an intermediary between computer hardware and software applications. However, the type of the enterprise software is not particularly relevant in the context of my thesis, it focuses in enterprise software business in general.

SOFTWARE COMPANY (SOFTWARE VENDOR)

“Software Company (Vendor) is any company providing a B2B (Business-to-Business) product and service where software is a major component irrespective of whether it is bundled with hardware, delivered as a perpetual, upfront paid, on-site license or delivered as a service through a browser or an app.” (Bech, 2015, ss. 20-21).

As the scope of my thesis will be business-to-business enterprise context, business-to-consumer software company examples and their markets will not be discussed. Additionally, even though small and medium software companies might also utilize certain elements of ecosystem practices, my focus will be in large, global software companies and their ecosystems. Mainly for the fact, that most of them operate within ecosystems that include many different third-party companies with specific purposes and are thus more interesting for research purposes. In this thesis, “Vendor” refers to the actual ecosystem owner, the software company.

SOFTWARE ECOSYSTEM

Despite the fact that a great variety of fundamentally different software ecosystems exist in the modern software market, the definition of the term can be explained in a rather exhaustive way. In the following are two examples:

“An economic ecosystem is a set of companies that exchange products or services to serve a common goal or to achieve higher levels of individual goals. A software ecosystem is an economic ecosystem that forms around one specific software vendor” (Popp & Meyer, 2010, s. 131).

"A software ecosystem is defined as a set of actors functioning as a unit and interacting with a shared market for software and services, together with the relationships between them" (Jansen;Brinkkemper;& Finkelstein, 2009)

SOFTWARE PARTNER (BUSINESS PARTNER OR SIMPLY PARTNER)

“A software company can act as a **Partner** of the software vendor. Depending on how much the software vendor outsources to the partner, there are different business models, processes and contracts.” (Popp & Meyer, 2010, s. 151)

In the context of my thesis, partner refers to all third-party companies that act as a part of the ecosystem, regardless of their specific purpose in the ecosystem. The partners include implementation partners, resellers, value-added resellers, value-added distributors, system integrators, consultants and extension developers.

CHANNEL SALES

“*Channel Sales*” or simply “*Channel*” is a term developed by the software industry and it refers to primarily selling (software), but also other activities conducted through the channel partner ecosystem, which is an alternative sales channel to direct sales, and hence is called the “*Channel*”.

OPPORTUNITY

Industry term for a potential sales opportunity, which is discovered when a customer need that could be solved with a product from the identifier's portfolio is discovered. Regularly the opportunity is then followed-up with different actions, with the eventual goal being selling the product to the customer.

TRINITY

“Trinity” is an industry developed, unofficial term referring to the ultimate simplification of the ecosystem business model, when there are three main parties involved; the vendor, the partner and the end-customer. While reality is often more complicated with even more than three parties involved, this is the simplified difference to the direct business model where there is the vendor and the end customer, with no significant third parties involved in the business whatsoever.

IMPLEMENTATION

In an enterprise software context, implementation encompasses all the after-sale activities required for finally achieving the state where the acquired software operates properly in its environment and serves the end-customer's business purpose it was purchased for. These activities might include analyzing user requirements, software installation, configuration, customization, testing, systems integrations, end user training and delivery. (TechTarget, 2015)

The nature of the implementation project also depends on the software delivery method, whether it is installed to the customer site or served from the vendor's servers. There is no single option for the division of work among the software vendor and the implementation partner, it can be different for each project and all the companies might have different practices, rules and regulations for channel sales. In some cases, the vendor might only provide the software while the partner does everything from license sales to delivery, or the partner might only step in for parts of the implementation project.

INTEGRATION (ENTERPRISE APPLICATION INTEGRATION [EAI])

“EAI is the sharing of data and business process logic across hetero/homogeneous instances through message-oriented-middleware (MOM). EAI may be managed by packaged vendors or through solutions provided by third-party. EAI is sometimes called application-centric interfacing. EAI is used to connect multiple systems at the application or database levels, using a form of middleware that is sometimes called a broker. The middleware moves information in and out of multiple systems, using pre-

engineered “connectors.” The connectors are a source of competitive advantage for EAI software providers, because if a connector already exists for the target and source application, the cost of interface development can be reduced.” (Gulledge, 2006)

ON-PREMISE SOFTWARE

“On-premises software is installed and run on computers on the premises of the person or organization using the software. An on-premises model is what most businesses are used to as is the traditional approach. Your servers are located in your office, you purchase hardware and software licenses and they are the property of your business.” (Visma Software, 2013)

Both of these general types of software, “on-premise” and “cloud” are being sold and distributed in partner ecosystems. Both technologies have their special characteristics affecting the way business is run in the ecosystem, which will be discussed at later stages of this thesis.

SOFTWARE-AS-A-SERVICE (CLOUD-BASED / “SaaS”)

“Software as a service or cloud based applications, are provisioned on distant computers “in the cloud” that are owned and operated by a provider as a service to customers. The cloud based applications connect to user’s computers via the Internet, usually via a web browser, allowing them to access their data anywhere and at any time.” (Visma Software, 2013)

Both of these general types of software, “on-premise” and “cloud” are being sold and distributed in partner ecosystems. Both technologies have their special characteristics affecting the way business is run in the ecosystem, which will be covered more in-depth at later stages of this thesis.

SOFTWARE ASSET MANAGEMENT (SAM)

“Software Asset Management (SAM) is a set of proven IT practices that unite people, processes, and technology to control and optimize the use of software across an organization. SAM can help you control costs as well as manage business and legal risks, optimize software licensing investments, and align your IT investments with business needs.” (Microsoft, 2017)

IT landscapes of large companies can get complex overtime, both from infrastructure perspective as well as legal and commercial perspective. Software Asset Management is the

process for managing this complexity. Some partner companies specialize solely in SAM consulting they then offer to end-customers.

INTELLECTUAL PROPERTY

“Intellectual property (IP) refers to creations of the mind, such as inventions; literary and artistic works; designs; and symbols, names and images used in commerce.” (WIPO, 2017).

Even though the official description of the World Intellectual Property Organization is not a perfect fit for enterprise software, it can still be discussed in the same context as copyrighted, non-tangible material if a patent is applied for the code of the software. However, the underlying purpose of the software cannot be patented and thus might be easily replicated as such by competitors. (WIPO, 2017).

1.3 Research questions

The main research question is the following:

“What are the implications of the software ecosystem business model as opposed to simplified, direct model from vendor, partner and end-customer perspectives?”

However, as brought up in the quotation earlier by Merovingian, usually all phenomena, also in the business world, have both the cause for initial action and the effect following the action. For this reason, the main research question is divided to two sub-questions. The first sub-question discusses the cause behind the implementation of the model in the first place. The second sub-question discusses the effects following after the decision has been made and been in place for long enough to be established as the standard operating procedure in the eyes of all the participating parties. In other words, cause and effect.

Hence, the two sub-questions that together answer the main question are the following:

- 1) Firstly, ***the cause*** for the business model is discussed: what is the business justification behind the ecosystem model in terms of software sales, distribution and services for the end-customers?
- 2) Secondly, ***the effects*** of the business model are discussed: what are the implications of the ecosystem model that follow for the software vendor, partners and the end customers?

1.4 Scope of the study

The literature review part of my thesis that is based on my B.Sc. thesis, focuses on clarifying how software ecosystems work on general level and what their underlying business value is. The B.Sc. thesis discussed both business-to-business (B2B) and business-to-consumer (B2C) software markets. After all, in addition to the global players of the enterprise software market, there are large B2C software ecosystems like Google's Play and Apple's AppStore that can be considered as great examples of highly active and beneficial software ecosystems. Even though these business-to-consumer ecosystems are not included in my core topic, they have a plethora of similarities with business-to-business software ecosystems. After all, their existence also enables opportunities otherwise unachievable for all parties in the ecosystem including the core company, third-party developers and the end users of the core company products.

However, in this thesis the scope will be solely B2B enterprise software business. Throughout the course of this thesis, the more detailed scope is embedded to the research questions that were strongly reflected also in my subject matter expert interview questions. The ultimate goal of the study is to cross-reference the results from literature review with real-life experiences of the expert interviewees, and conclude if the real world reflects the theory presented in the literature. As a business model, the ecosystem partner channel is still relatively new and established phenomenon and thus researching it is very interesting.

1.5 Structure of the study

First I will explain the terminology and current trends behind software ecosystems in order to create a framework for understanding what the business model actually includes, and methodology used to research this topic. I will shortly cover historical events that have affected the evolution of ecosystem based software market and business-to-business channel sales as part of it. I will dive deeper into what "channel sales" and other relevant terms actually stand for in the context of modern, global enterprise software business. As the most visible examples of the enterprise software ecosystems in the business-to-business software market are formulated around strategic partnerships with global software giants such as SAP, IBM, Oracle and Microsoft, I will briefly introduce examples of how these companies have adapted the ecosystem mentality and opportunities enabled by it, such as channel sales as revenue driver in their business strategies, and what specifications their partner operations have.

In addition to introducing these current ecosystems, I will also explain in more detail the general business drivers and desired goals of the model for all parties involved. I will also explain how

these business benefits are most commonly pursued by these strategic partnerships in the software industry. I will also discuss what kind of players and specific roles are most commonly involved in the business, and what their business drivers are behind the decision of participating in the ecosystem.

In the empirical section, I will discuss the subject matter experts’ experiences, opinions and points of view about the ecosystem business reality, its benefits and challenges, from their perspectives as well as from their customers’ perspectives. Then I will cross-reference findings from the interviews with findings from the literature review in order to determine where the theory and practice seem to align, and where there seem to be some contradictions between the two. Finally, I will answer the research questions based both on theory and interviews, and make my conclusions based on my research.

The structure flows as the following:

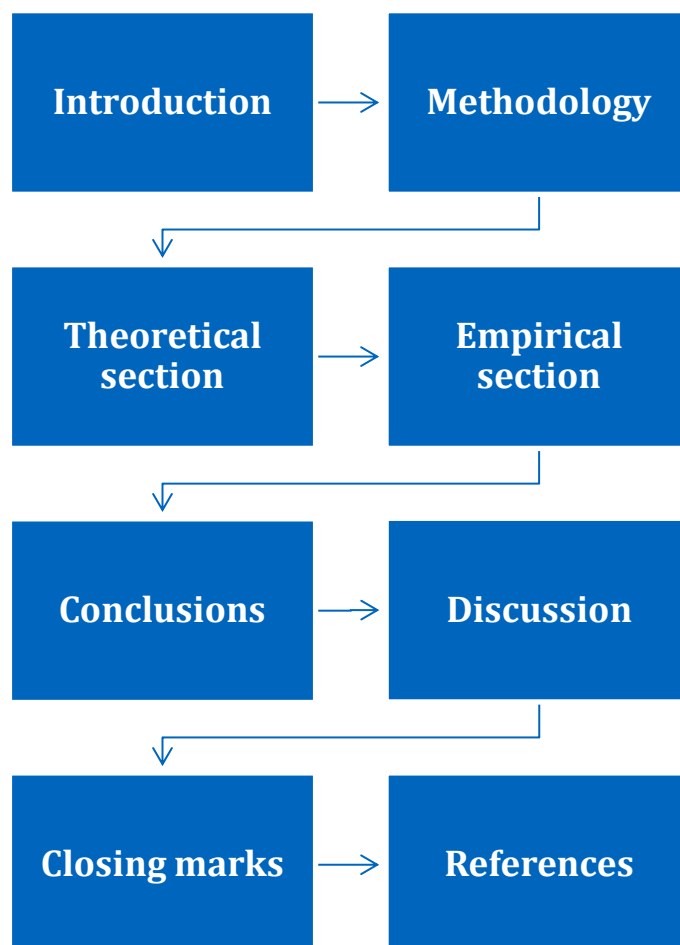


Figure 1. Structure flow chart

2 Methodology

2.1 Research methodology

The literature review part of this thesis is based on existing public sources such as articles, books and Internet sources. The literature I have used to write this thesis can be roughly divided into two subcategories; articles on software ecosystems and articles on the software business in general. In addition to other sources, I used several books as academic source material when writing this thesis, out of which *Profit from Software Ecosystems* by Karl Michael Popp and Ralf Meyer (2010) proved to be the most useful for my topic and subtopics. The empirical part of this thesis is done by interviewing six subject matter experts from different organizations and parts of one particular global software ecosystem. They include employees of the actual software vendor and thus the ecosystem owner, people from value-added distributors as well as people from several channel partners with entirely different focus areas and business strategies.

However, I did not interview any of the software vendor's end customers. Partly because I did not have access to right people, but also due to the following two facts; firstly, the customers are usually not subject matter experts of the ecosystem as such. The customers focus on their own businesses from entirely different industries and only use software merely as tools to run their businesses. Secondly, the partners I interviewed serve end-customers directly, listen to them and hence were able to introduce their perspectives as well. Of course, a comprehensive view could have been achieved by having more interviewees also from the end-customer side. This leaves room for further studies and this topic definitely still has potential for more research to be done. However, I was satisfied with the professional variety of my respondents as well as the difference in views about different aspects of the business we discussed in the interviews. Finally, the findings from the literature review are aligned with the conclusions of the empirical research to form a comprehensive picture of the topic.

2.2 Research process and data gathering

The literature review part of my thesis was completed in a traditional way by searching and reviewing literature around the topic, and then filtering the most relevant ones to be used as source material in the text. Certain keywords such as "ecosystem" were very useful in finding relevant articles, whereas certain industry terms such as "channel sales" were not very well known in the academic literature. I was happy to find multiple books with the exact right topic

to provide more in-depth knowledge in addition to the articles. However, even though there is a lot of writings about the topic, concrete conclusions about successfulness of companies utilizing the strategy are harder to come by as information needed is often classified and not covered by general reporting requirements of publicly listed software companies.

The empirical part of my thesis is based on six subject matter expert interviews. I chose these people based on my previous experiences in the business. I knew that these people have plethora of knowledge about the software ecosystem business from multiple points of view due to their positions in different roles and companies with different scopes and business strategies in the ecosystem. I thought about different aspects I wanted to bring to the discussion to get their points of view on these. I wanted to make sure that same topics are discussed with each one of them to be able to compare their opinions on these. In later stages, I will introduce these aspects and my findings regarding them. I let the interviewees to focus on topics they were the most knowledgeable and comfortable with as well. After the interviews, I compared the respondents' answers each aspect at the time to the findings from the literature.

2.3 Description of the case company

The case company of my empirical research section focuses on the ecosystem of one global, multinational technology company that has a very broad range of software solutions in its portfolio for multiple business purposes, industries and customer segments. They also have a global business partner ecosystem that operates as value-adding sales and distribution mechanism of their enterprise software solutions in multiple markets around the world. They also have highly developed partner programs for managing the ecosystem, enabling selling and distribution of their software portfolio as well as rewarding them according to their reselling policies. The partners also have several ways to affect product development and such activities.

This company was a natural choice, because I already possessed information about its way of doing business in this area and had connections to potential interviewees, from which I then chose the ones. From my own experiences, I also knew that this company has developed its partner programs and policies related to channel sales further than some of its competitors have, making it a more interesting research target than some of the other players in the industry. Even though my empirical research is based on interviewees of subject matter experts who are all based in Finland and operate on the Finnish market, the business model follows the same principles everywhere in the world with cultural differences and local laws irrelevant for the core business reasoning. Additionally, the partner programs and policies of this particular

company are global and thus the research applies on a global scale regardless on the Finland based empirical research.

2.4 Interviewed subject matter experts

Table 1. Expert interviews (total interview time 4h40min)

<u>Organization number</u>	<u>Organization type</u>	<u>Position description</u>	<u>Length (min)</u>	<u>Interview type</u>
#1	Vendor	Channel Manager	74	Semi-structured
#2	VAR	Vendor Business Owner	40	Semi-structured
#3	VAR	Project Manager	48	Semi-structured
#4	VAD	Partner Manager	49	Semi-structured
#5	VAD	Partner Manager	20	Semi-structured
#6	Partner	Software Consultant	49	Semi-structured

There were six subject matter experts I interviewed for my empirical section, as presented in Table 1. I chose these people based on my previous experiences in the business. I knew that these people have plethora of knowledge about the software ecosystem business from multiple points of view due to their positions in different roles and companies with different scopes and business strategies in the ecosystem of the software vendor company.

For my interviewees' anonymity's sake, I will just refer to them by numbers #1 to #6. I use the past form, because my research is based on what the situation was by the time I conducted the interviews. #1 worked at the ecosystem owner, the global software corporation and he was responsible for a certain product portfolio in several customer segments. The team he worked in also manages the software partner ecosystem of this company, so a lot of his work revolved around ecosystem partner management and channel sales efforts. #2 was earlier in a very similar

position at the vendor, as #1. However, by the time I conducted these interviews, he had transferred in one of the partner companies of the vendor. Over there, his responsibility was ownership of the software portfolio business of this particular software vendor. This included analyzing the portfolio of the vendor in order to determine what the partner he worked at should include in their own offering, as well as sales of these solutions to their customer base. This particular partner had a very broad range of services and products in their portfolio from multiple software vendors they represented. These kinds of companies have very different processes compared to partners that only represent one software vendor or have a strict focus. This issue will be discussed more in-depth in the following sections of this thesis.

#3 worked in a rather small partner company which he co-founded and now acted as a project manager. They offered very high level expertise in project management in multiple business areas, but their main expertise was in master data management (MDM). This partner was more motivated by selling their own expertise on multiple technology disciplines than reselling the vendors' software, but they also acted as resellers of multiple software vendors. Mainly because often consulting projects open opportunities for software solution sales that they get compensated for according to the partner agreements of the vendors. #4 worked at one of the vendor's Value-Added Distributors (VADs). This VAD company was global and represented many vendors throughout the world. In Finland, they also had multiple vendors under their representation. However, #4 only worked with this particular vendor and not the others. She was responsible for all the software business on this vendor. As an employee of a VAD, she did not have direct end-user contact, as VADs only serve the reseller partners.

#5 had a very similar position as #4, but at a different VAD. This VAD was a smaller company than the VAD #4 worked at. Thus, they did not have as broad range of services and only represented this one particular vendor in Finland. Naturally these two VADs competed against each other in Finnish market. The nature of competition between the VADs is opened more in-depth in the theoretical part of this thesis. Interviewee #6 worked as a software asset management (SAM) consultant in company specializing in that. In the enterprise software market, licensing issues are often complicated. If not optimized, customers might end up paying more than they should or not being able to take full advantages of their software assets. This company helps the customers in these issues and similarly can sell licenses from opportunities they discover in consulting projects. They represented multiple vendors, and their customers usually have history with several vendors and wish to optimize their entire landscape.

2.5 Interview structure

The empirical part of this thesis is conducted by interviewing six subject matter experts from different organizations and parts of one particular global software ecosystem, which acts as a great, highly developed and mature example of the ecosystem business model in the enterprise software context. All the interviews followed roughly the same formula in order for the answers to be comparable with one another and to enable analyzing different views of the same, relevant topics. In the beginning of each interview, I asked the subject matter experts to define their role in order to get a good understanding about their positions in their organizations. I was already familiar with the companies they work in, so there was no need for them to explain further what their respective companies' roles are in the ecosystem. Secondly, I asked them to share their insights briefly how they see the history of the business model. Meaning, how has the business model developed to the form it nowadays is through time from their understanding. While this was not directly related to my actual research questions, it gave good additional insight in understanding the reasoning behind the modern setting.

The focus of my research and interviews was to understand and ultimately compare the benefits and challenges, pros and cons, of the ecosystem business compared to simplified, direct model. For this reason, I wanted my interviewees to describe the benefits and challenges from their positions' and organizations' perspectives. First, I asked them to describe the benefits on the current ecosystem structure for them, meaning what they consider beneficial for them as part of the ecosystem, which would not apply in a simplified business model. Second, I asked my interviewees to describe what they consider especially challenging in their companies' positions. These were interesting aspects, as many of the challenges might be difficult to affect since there are rules in the ecosystem that must be followed. Additionally, I asked their thoughts regarding the challenges from the ecosystem owner perspective, why are the perceived challenges not being addressed as they would wish.

After asking questions from their own companies' and positions' perspectives, I proceeded into questions from the end customers' point of view. I did not have any actual end users of this software vendor among my interviewees, but all my interviewees were very knowledgeable about their customers' opinions regarding the questions I had. Thus, they were able to give very good answers and insights also from the end users' perspective. Again, I asked questions about benefits and challenges the end customers face as opposed to the direct, simplified business model. Obviously, these differed from the ones the companies in the ecosystem faced. We also

discussed the reasoning behind the fact that the customers face challenges that are not necessarily being addressed properly. Next, we discussed how the experts felt that the business model should work in perfect world, if there were no frictions or limitations whatsoever. This gave a good overview what they saw as the main obstacles in the business model preventing it from working in a perfect manner.

In the next section of my interviews, we discussed about the current organizational setting of the business model. There are multiple parties that each have their own responsibilities, but I wanted to get some insight if my respondents thought that the setting was optimal or not. I asked if they feel there are too many parties involved or if they feel another party would be needed for some particular task that might be often left outstanding at the moment. Finally, we took a deeper dive to product development point of view, which is one of my research areas in the thesis. This was a very interesting topic, because material of this sub-topic in the business literature was very difficult to find, so interviews were practically the only possibility to get insight on this.

General benefits for product development were covered in some of my sources, but the questions of how the partners and customers get their voice heard in the global ecosystem, could not be answered by literature. First, we discussed about general topics the customers have power to affect in the ecosystem. Then I inquired if the experts have been under the impression that their end-customers would feel they do not have enough ways of affecting the software vendor. Finally, we ended up in discussing how the current model could be improved from the end customers' perspective with respect to the issue.

2.6 Analysis

The literature review was conducted by systematically forming a framework to answer the first sub-question, the theory supporting the business model itself. This was done first, mostly to help me determine what kind of information could not be found from the literature, thus what details should the empirical research focus on and what areas should it deepen. While the structure of the interviews remained approximately same throughout the interviews, I attempted to highlight the areas left somewhat vague by earlier respondents in the interviews. However, mostly the interviewees felt comfortable discussing their areas of domain expertise as opposed to my exact wishes, and I respected their preferences in this sense. It did not cause problems, because I had chosen interviewees from different companies and roles in the ecosystem to get answers from multiple perspectives and areas of core expertise.

After conducting the interviews, a clear need for further academic research from literature in certain topics surfaced to enable comparison of the empirical findings to corresponding literature. I reviewed more literature of these sub-topics in order to deepen the theoretical frame around them. Therefore, the analysis process was iterative; going back and forth with theoretical frame harvested from the literature and findings gathered from the empirical part and the interviews.

By this iterative process, I was able to discuss most topics from both theoretical and practical perspectives and find where these two align or contradict with each other. However, in clear majority of the discussed areas, no remarkable contradictions were found. The interviewees confirmed most of the assumptions I had made from the literature, and brought their points of view to deepen the topics from their perspectives. The interviewees additionally provided their views regarding the challenges that follow from the models presented in the theoretical section. This was particularly relevant additional information for the analysis and conclusions, as the theories rarely discuss practical challenges that follow from applying certain theoretical models. Hence, the division to cause and effect in my analysis flow came to mind, which fitted the thesis structure well.

In the empirical section I also compared my interviewees' answers in each topic at a time to get a comprehensive view about differences in their perceptions about each topic to one another. This was conducted by comparing their answers per sub-topic column in an excel spreadsheet. In the ecosystem business environment, multiple different policies and rules of engagement exist, but due to its complexity and different priorities and agendas of the agents, there is very often room for human consideration and interpretation of the common rules. For this reason, cross referencing the interview answers was interesting, as somewhat different perceptions of same topics always came up. However, cross-referencing the empirical findings with the literature in the iterative process described above was the main methodology, as the thesis scope was not to research differences of individual perceptions of certain topics in an ecosystem environment, but research general implications of it.

I also briefly discussed the topics that came up in the interviews, but did not directly refer to any parts of the literature review and thus analysis of them was left for further studies. They are found in chapter 5.1.4, “Additional findings”.

3 Literature review

3.1 Early stages

It could be argued that people tend to remember hardware better than software. In fact, at first these two terms were not separated from each other, since software was produced specifically for the computers they ran in. The word “software” was not separated from hardware until 1958 by John Tukey (Mace, 2009). In 1959, the source code of the software running a specific machine was referred to as “software” (Popp & Meyer, 2010, s. 23). The first third-party application, the very basis of certain type of software ecosystems, was developed in 1964 by Applied Research Autoflow. In addition to being the first registered third-party application, it was the first software product ever to hold a patent granted by the US patent agency (Mace, 2009). IBM was also involved in the development phases later on (Mace, 2009). In the late 1960’s, as the software industry advanced, the US Attorney General demanded that software and hardware have to be separated when billing the customer, as oppose to bundled billing, which had been the industry practice until the end of 1950s (Popp and Meyer, 2010, 23).

After the separation of hardware and software, the next step was the separation of operating system (OS) from hardware, meaning that the operating system could be a product of an external company. In august 1980, IBM, which was one of the very first companies to manufacture personal computers (PCs), ordered an operation system from Microsoft for its new computer. As a result, the MS DOS operating system was developed in a joint venture between Microsoft and IBM (Popp and Meyer, 2010, 23). Eventually the IBM PC shipped in 1981 with the Microsoft operating system MS-DOS, which was later on licensed to 50 hardware manufacturers in 1982 by Microsoft (Mace, 2009). Consequently, the MS DOS became the first commercial operating system and created the very base of the personal computer market as we know it today (Popp and Meyer, 2010, 23).

In 1972, almost simultaneously after the beginning of Microsoft’s success story in the US, five former IBM software engineers by the names Hopp, Hector, Plattner, Tschira and Wellenreuther established a company specializing in enterprise applications and processes. They named the company *Systemanalyse und Programmentwicklung* (“System Analysis and Program Development”), but it was later on updated to stand for *Systeme, Anwendungen und Produkte in der Datenverarbeitung* (“Applications and Products in Data processing”). SAP AG was born (Popp and Meyer, 2010, 23; SAP AG History). At the beginning, SAP focused on developing software for mainframe computer systems, but eventually became the largest

Enterprise Resource Planning (ERP) software vendor in the world along with becoming the owner of one of the largest partner ecosystems in the world (SAP AG History, 2017).

One's success on a certain market attracts more players to the market, since commercial third-party developers are motivated by revenue opportunities. In 1998 after Palm Inc. released the Application Programming Interface (API) to third-party companies, which enabled developing applications to their devices, the amount of companies in this field increased to almost tenfold during just one year (Mace, 2009). Since having a successful ecosystem around the company is a desirable situation, many have tried over the years. Reasons for the failures of specific platforms may have been related to difficult monetizing, inconsistent APIs, overly strict limitations set by the ecosystem owner or similar phenomena which have made the ecosystem less desirable for the external software developers (Mace, 2009). Today's ecosystem winners have managed to allure all the necessary players in their ecosystems and thus reached market positions in which they are extremely difficult to challenge by new players in the market.

3.1.1 Shift from closed to open innovation

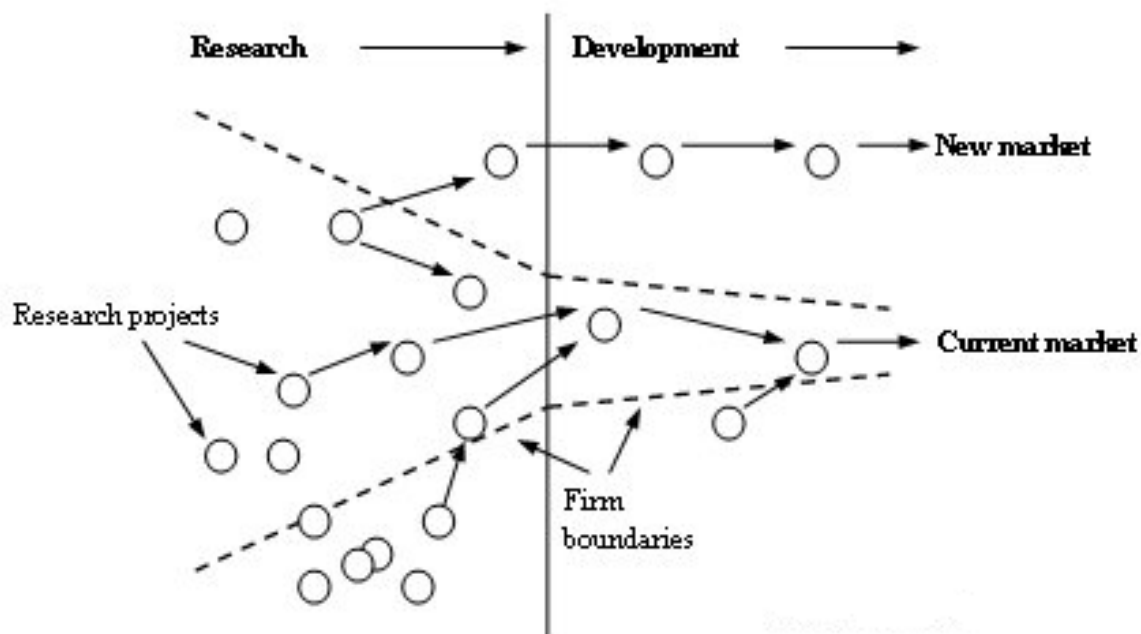


Figure 2. Open innovation paradigm (Chesbrough, 2003)

"The very successful model of closed innovation within large firms has gradually given way to a more diffused, more externally focused way of organizing innovation" (Chesbrough, 2003, s. 93).

Embracing the open innovation paradigm, as illustrated in Figure 2, has often been the obvious way for start-ups and science focused communities such as universities to conduct. Historically multiple corporations have seen success by focusing on closed innovation within the company boundaries, but later gone through different levels of transformations. This shift in openness paradigm has played a major part in formulation of the modern, ecosystem focused enterprise software business model that is the focus of this thesis. Regardless of the scale and difficulty of the transformation, the purpose has generally been to embrace the open innovation paradigm and build sustainable ecosystems around them to guarantee their survival against competition utilizing the same strategy. Successfulness of this has eventually proven to be crucial in determining the winners of the market. (Chesbrough, 2003)

For instance, IBM, a large multinational technology company discussed earlier, is one the examples of corporations fitting in the scope of this thesis that have previously been firm believers of the closed innovation paradigm. They have later gone through the transformation from closed to open innovation paradigm during their over 100-year old journey to today. In IBM's case as well as in multiple other occasions, the transformation, while crucial for the long-term survival of the corporation, was not easy. In fact, it took IBM to the edge of destruction as many were not able to go through this transformation having used to "old ways" of conducting business. However, the transformation has paid off as IBM remains one of the largest enterprise software companies utilizing the open innovation paradigm amongst their global partner ecosystem. (Louis & Gerstner, 2003) (Chesbrough, 2003)

3.2 What are software ecosystems

*"A **Software Ecosystem** is an economic ecosystem that forms around one specific software vendor. As the software industry changes rapidly, research presented earlier shows, that the success of a software is not only defined by its own success but by the success of its ecosystem."* (Popp & Meyer, 2010, s. 131)

In most cases, a software ecosystem formulates over time around one large software vendor that owns and develops its own software portfolio. It then enables smaller businesses from similar or related fields of business to resell its product portfolio, supplement their own offerings with the organization's product or service portfolio, or distribute their own product or service offering via the organization's unique distribution channels. The purpose of the ecosystem is to act as an environment that enables all parties in the ecosystem to benefit from each other's existence and create value that could not be captured as efficiently, if at all, without

the ecosystem and the external entities as parts of it (Buxmann, Diefenbach, Hess, 2013, 55). Although strategic partnerships complicate the business, they have been successfully utilized in almost every major industry (Teng, 2003). In general, software ecosystems enable increasing value to existing end users, increasing attractiveness to new users, sharing the cost of innovation between the partners and increasing lock-in effect among the global clientele. (Bosch, 2009); (Weiblen, 2012); (Hanssen, 2012) Software ecosystem exist in both B2C and B2B markets. But as the scope of this thesis is the B2B enterprise software market, the B2C side will not be discussed further.

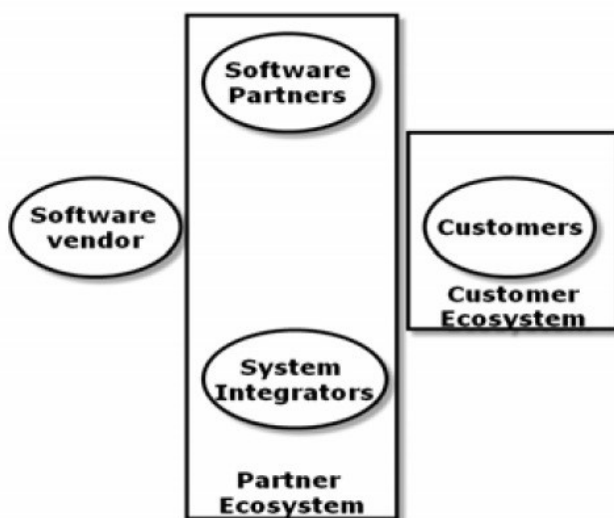


Figure 3. Software Partner Ecosystem (Popp & Meyer, 2010)

Figure 3 is a very basic illustration of a software ecosystem. It presents the basic setting of the ecosystem – the vendor, partner ecosystem and customer. More importantly, the partner ecosystem being organizationally located between the vendor and the customer. However, it does not yet open the logic and structure behind the partnerships in the ecosystem business model, or dive deeper into monetizing logic or benefits that are pursued with the ecosystem strategy as opposed to a traditional direct sales and distribution strategy. These details will be covered in the following chapters.

Software ecosystems at their current global scale are still a reasonably new phenomenon and thus comprehensive studies of their details remain few. In any event, as a business strategy an ecosystem as a sales and distribution channel has proven to be extremely effective, as well as highly challenging to replicate for the competitors at the same time. However, these ecosystems are growing highly complicated as they increase in size and adapt more players. As result of

increased bureaucracy and complexity, potential adopters might consider the process of adopting the ecosystem and gaining its benefits through time too risky and not worth investing to resources to (Yu & Deng, 2011).

3.2.1 Software ecosystem structure

“To create value with a software ecosystem (SECO), the platform owner has to ensure that the SECO is healthy and sustainable” (Fotrousi, Fricker, Fiedler, Le-Gall, 2014)

Due to software ecosystems’ relative newness as recognized phenomena in general, activities and strategies they enable in functions such as sales, distribution and services, still have not been researched comprehensively. As a growing trend in the industry, software ecosystems have not been recognized for more than a few years. Their newness results to the fact that industry standards are still under development and have not been stabilized so far. As the complexity of the ecosystems grows, companies may start to experience trouble in distinguishing the specific software ecosystems in which they are active, and they might encounter trouble using the ecosystems for their strategic advantage (Boucharas;Jansen;& Brinkkemper, 2009).

Similarly to the industry standards, formal ways of modeling software ecosystem structures have not been standardized at present. Formal models are lacking in illustrating both the ways in which the actual ecosystems function and in how the products are being exchanged between the parties operating in the ecosystem. However, modeling and strategic planning methods are currently being developed and some attempts have been made to formalize the software ecosystem modeling. In this section, I will present one approach to how the ecosystems could be modeled to create applicable frameworks to enable deeper understanding of the structures and functionalities behind the software ecosystems (Boucharas, Jansen, Brinkkemper, 2009; *Yu & Deng, 2011*).

Figure 4 illustrates a basic enterprise software ecosystem environment, where the primary entities are the software vendor who has originally developed the software, and the customer, who is the end user of the software provided by the vendor. The primary entities, the vendor and the customer, both have main goals. The software vendor’s main goal is to successfully run its software business, whereas the customer’s main goal is to get software that fulfills its business requirements and thus keeps it satisfied. Naturally, running a software business requires producing the software and executing activities enabling sales and distribution of the product portfolio to the clientele. Since in the modern software business procurements are

usually conducted in the form of fixed-period subscription and support licenses, the transaction consists of the actual software, support and maintenance. When delivered, the customer pays the monthly, quarterly or yearly fees and ideally expresses satisfaction with the current solution.

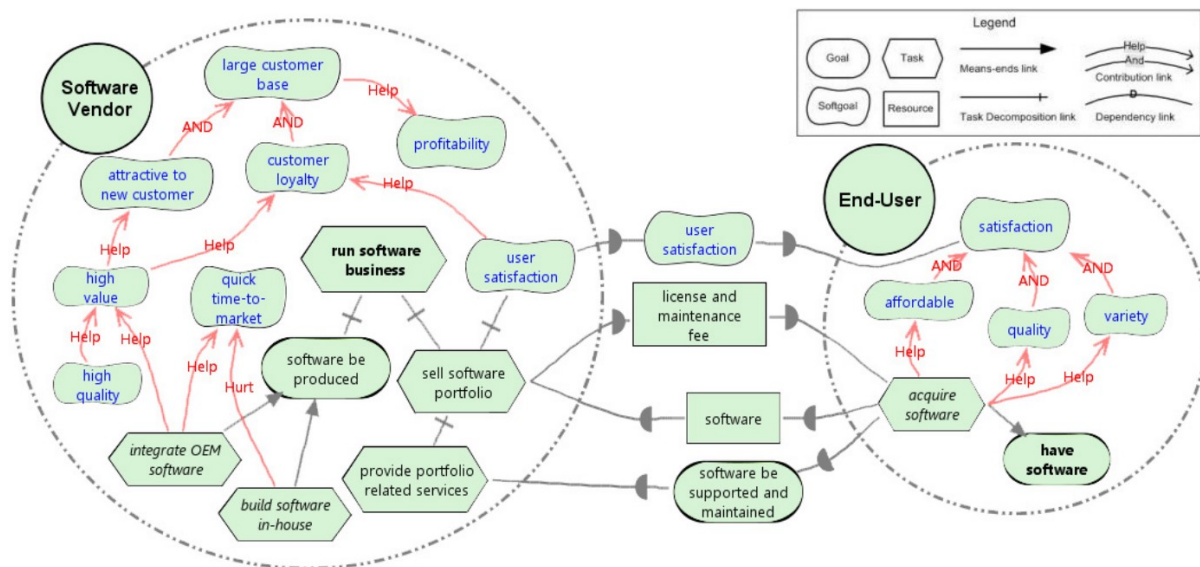


Figure 4. Model showing relationships between Software Vendor and End-User (Yu & Deng, 2011)

In this basic model, the software vendor's main goal, running a software business successfully, consists of several goals and sub goals, which are illustrated in Figure 4 with oval shapes. These goals and sub goals can only be completed by executing tasks marked with hexagons. Naturally, completing the goals and sub goals requires resources. In Figure 4, "software" as a resource is required to complete the task of acquiring software and "income" in the form of fees is required to sell software to the market. However, despite the fact that the primary entities are willing to complete the tasks presented in the model, the model does not specify how they are supposed to be completed and who is supposed to complete them.

The point of the model is that in a modern software ecosystem, traditional roles and principles of the distribution of these tasks might be completely retaught when comparing to basic business-to-consumer transaction of services and goods. It might not be the software vendor itself who actually sells and distributes the software to the customers despite having originally developed the software in question or otherwise acquired the ownership of it.

3.2.2 Defining ecosystem boundaries

Defining the boundaries of a specific software ecosystem is not unambiguous since in most cases they reach all the way to the end users via the partners in the ecosystem. From the end

users, the ecosystems reach even further along supply chains and the customer's systems, depending on the level of integration. However, to draw the boundary at some logical point, the ecosystems' boundaries have historically been determined based factors such as market, technology, platform or firm (Brinkkemper & Finkelstein, 2009).

Market boundary stands for ecosystems that are centered on one specific market, such as one specific enterprise application in a specific country. In software ecosystems based on a certain technology, such as specific programming language that acts as a base of the products that are being exchanged in the ecosystem, the owner of the ecosystem is usually the entity holding the intellectual property rights to that specific technology (Brinkkemper & Finkelstein, 2009). Examples of platform specific software ecosystems are easier to find from the business-to-consumer side. In Apple AppStore or Google Play, third-party entities can develop software to devices operating on the platform since the owner has released the platform's application programming interface (API) to public use in order to benefit from the external developers. However, as this thesis focuses on enterprise software, firm-specific software ecosystems are more suitable examples. They are formulated around one specific, usually large, software vendor. In software ecosystems like these, the partners might have several different roles (Brinkkemper & Finkelstein, 2009).

As software itself is not a physical product but replicable intellectual property, choosing the ecosystem strategy is bound to raise the question of intellectual property management by the vendor. To allow the ecosystem to extend the offering of the vendor, the partner network must be granted access to the source code of the offering, which obviously exposes it to competitors to inspect as well. However, the upside is considered larger than the downside; the value brought by the developer ecosystem exceeds the rather minor threat of competitors inspecting the software. Mostly features and functionalities of the software must be public information, because they play a key part in marketing and demand generation efforts the software providers undergo.

3.3 Different companies in software ecosystems

“We cannot expect that all our independent channel partners will have exactly the same business model, thus we need to understand each individual model or at least group them according to their characteristics.” (Bech, 2015, s. 37)

Software companies can take different roles in the ecosystem depending on the business goals they aim to achieve (Popp & Meyer, 2010). Figure 5 shows several roles a company can have

in an ecosystem. In a complex ecosystem environment, one specific company can even act as a supplier, partner, customer and competitor. In situations like this, communications towards the company should be carried out with extra delicacy to avoid damage to any of these several relationships between the company and the software vendor. Partnering up with a competitor naturally might require sharing some otherwise inaccessible information, but the upside of it is often perceived more significant than the possible downside of it since it is done in the industry. (Popp & Meyer, 2010, 153)

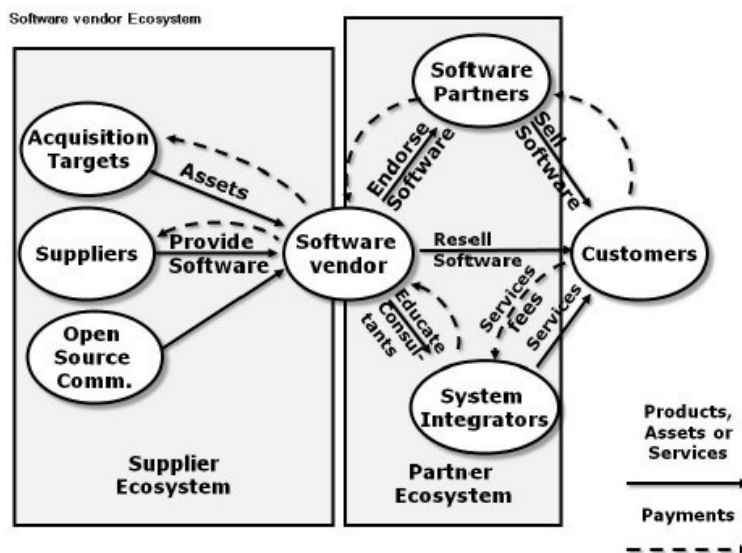


Figure 5. Exchange of products and services in the Software Ecosystem (Popp & Meyer, 2010)

3.3.1 Software vendor

“Software Company (Vendor) is any company providing a B2B (Business-to-Business) product and service where software is a major component irrespective of whether it is bundled with hardware, delivered as a perpetual, upfront paid, on-site license or delivered as a service through a browser or an app.” (Bech, 2015, ss. 20-21).

As the scope of my thesis will be business-to-business enterprise context, business-to-consumer software company examples and their markets will not be discussed. Additionally, even though small and medium software companies might also utilize certain elements of ecosystem practices, my focus will be in large, global software companies and their ecosystems. Mainly for the fact, that most of them operate within ecosystems that include many different third-party companies with specific purposes and are thus more interesting for research purposes. In this thesis, “Vendor” refers to the actual ecosystem owner.

3.3.2 Software partners

“A software company can act as a **Partner** of the software vendor. Depending on how much the software vendor outsources to the partner, there are different business models, processes and contracts.” (Popp & Meyer, 2010, s. 151)

“Independent channel partners operate in their own name, at their own expense and at their own risk.” (Bech, 2015, s. 21)

In the context of my thesis, partner refers to all third-party companies that act as a part of the ecosystem, regardless of their specific purpose as a part of the ecosystem. The partners include implementation partners, resellers, value-added resellers, value-added distributors, system integrators, consultants and extension developers.

There are partners who have the required certifications, defined by the software vendor, to do the actual software license sales on behalf of the vendor as well as partners who do not sell the software licenses but do the implementation projects on behalf of the vendor, after the sale is made. The visible result is similar to the end-customer excluding the fact that a license contract is made between the customer and the partner instead of the customer and the vendor. A strategic initiative of many global software vendors, including my case company, is to outsource sales to the partner ecosystem especially in small and medium customers. This is often not considered as “core market” as they target their own efforts to the largest customers. The non-core market customers are handed out to the partner ecosystem until they are qualified enough for the vendor’s attention (Bech, 2015, s. 87) To safeguard this initiative, the vendors ensure that both the customers and their own sales personnel are incentivized to let the partners do the sales instead of the vendor itself. However, allocating partner efforts to non-core markets such as the mid-market, might lead to a situation where this segment is fiercely contested. (Buxmann, P., Diefenbach, H., Hess, T., 2013 ss. 76)

Additionally, as the software vendors’ core business is product sales, they must aim for technological product leadership over competition, as it is the core of their business. Even though the development costs of the products are massive, marginal costs of distribution can be low due to scalability of software. Hence the product leadership is the key to high volumes, which is crucial for global software vendors. However, with the partners the value proposition is based on the consulting work done for an individual customer at a time to maximize the value they get from the software procurement. Hence customer intimacy and operational excellence come first as priority for the software partners. This fundamental difference between the value

propositions of the players in the ecosystem is illustrated in Figure 6 below. (Bech, 2015, ss. 38-39)

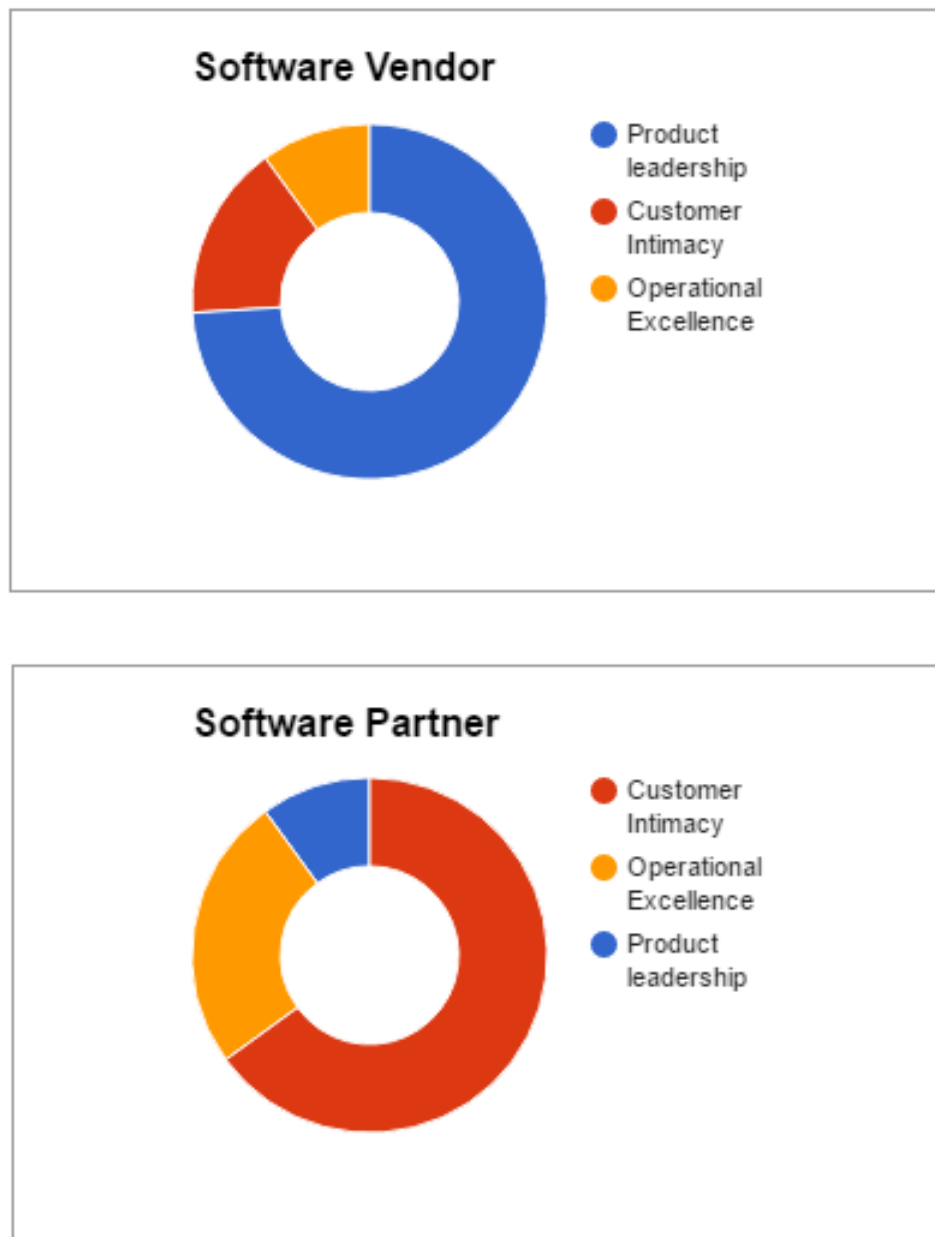


Figure 6. Difference in strategic focus (Bech, 2015)

Partners have different strategies and business models in the ecosystem, like brought up in the quotation from Bech's book in the beginning of this chapter. One of the determining differences is the question of exclusivity with one particular vendor. Meaning, if a partner represents and resells only the offering of one software vendor or do they represent multiple different ones. Even though these multi-vendor partnerships might be risky, the upside of partnership still seems to be considered higher than the downside of them also representing the competition. These strategic choices naturally influence the relationship between the partner and the vendor.

(Popp & Meyer, 2010, s. 153) Representing multiple competing technology brands makes the relationship more complicated as they can get business regardless of the customer's platform choice. In these situations, the vendors are often forced to proceed with less open communication, which might hinder the quality of the outcome. (Bech, 2015, ss. 129-130)

Software partners can be further subcategorized into multiple categories, but the most common ones in the enterprise software context are value-added resellers, value-added distributors and system integrators. Additionally, there are multiple different consultants and service providers associated with the ecosystem who provide specified services, such software asset management (SAM) that was briefly explained in the terminology section.

But for the sake of simplicity of the text, mostly the following partnership formats will be discussed throughout the course of this thesis:

Value-Added Resellers (VAR)

While the definition of a Value-added Reseller is not fixed and might differ depending on which company ecosystem is in question, it often stands for a reseller partner that does more than resells the basic software package offered by the vendor. VARs might for example engage in co-marketing activities with the vendor and complement the vendor's basic offering by their own extensions that fulfill specific customer requirements that are not completely addressed by the standard offering.

However, the principle is that a VAR's activities bring more value to the ecosystem than just implementation resources. To be able to offer a broad range of services, they have to invest in necessary skills and certifications. A VAR might represent several, even competing software vendors and thus offer multiple technology platform choices to customers in order to reach maximal business potential. (Bech, 2015, ss. 129-130)

Value-Added Distributors (VAD)

A Value-added Distributor is an independent third-party company between the software vendor and the channel partners including resellers, value-added resellers and system integrators. The VAD is essentially acting on behalf of the software vendor in activities such as reseller management and market development. Depending on the company in question, different activities might be outsourced to VADs by both the software vendor and the software partners. Usually the VADs are not in direct contact nor in contract agreements with the end customers in any situation. (Bech, 2015, ss. 131-132)

All the software vendors do not have VADs in their ecosystems, but my case company utilizes multiple VADs that might differ from one geographical location to other. To protect their interest, the vendor often has several VADs in each location, because the competition between the VADs ensures that they bring value to their fullest potential. After all, the partners can choose the VAD that serves them. Other VADs might operate globally while some of them might be mostly local players. The activities of VADs as well as the value they bring in my case company will be discussed more in-depth later with a case example of Arrow ECS.

System integrators (SI)

“A System Integrator is a company that provides services to customers of software vendors. These services are focused on the implementation of the software vendor’s products and the integration of these products with other products the customer operates.” (Popp & Meyer, 2010, ss. 153-154).

Providing these services usually requires technical expertise such as applications engineering, integrations engineering and knowledge of different technologies as well as industries. The solutions they offer might include products from one or more software vendors. Large, global system integrators represent multiple software vendors and often also offer technology solutions of their own as well. (Lee, 1996) The main difference to general software partners is that their service portfolio and the offered product portfolio is generally broader and they possess more technical expertise and often more manpower than the more focused and often local software business partners do.

3.3.3 End user

“The person ultimately intended to use a product, as opposed to people involved in developing or marketing it.” (Downing, 2003)

In software ecosystem business where indirect deals are common, technically the software transaction might happen between the vendor and the reseller partner. After this, the reseller partner extends the software to the end user, the customer. For the vendors, same organizations can be technically both partners and customers simultaneously. However, the partners are not usually referred as customers or end users despite this fact.

3.4 Business as usual

In addition to the general assumption about the nature of the companies in the partner ecosystem, there might be players in the supplier ecosystem outside the actual partner

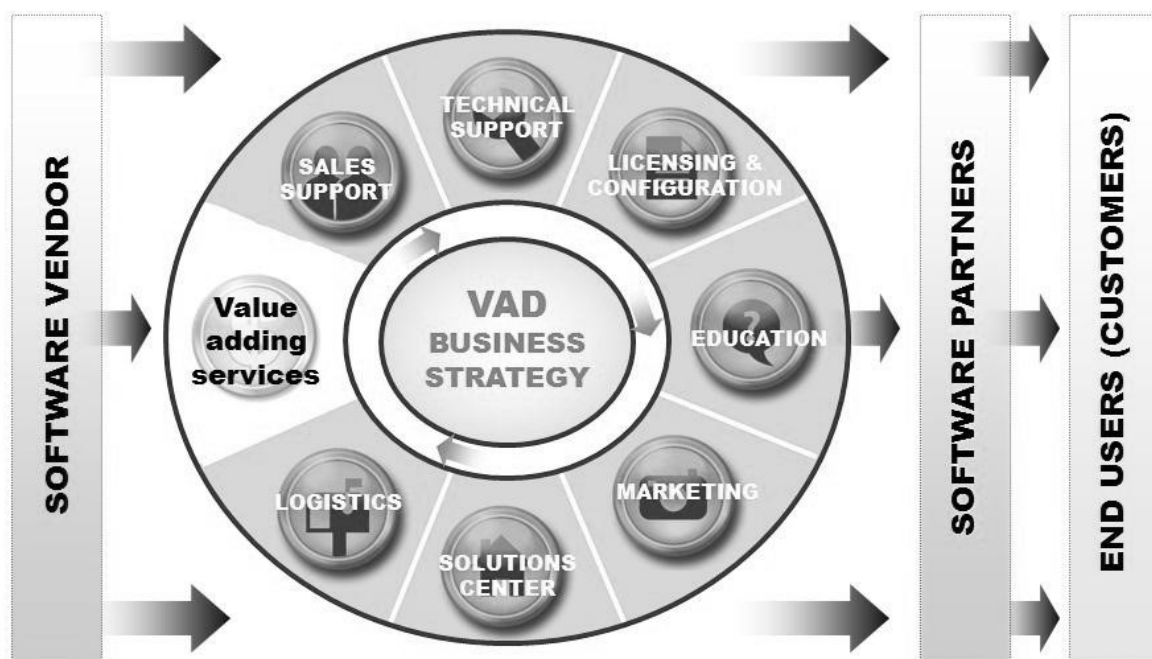
ecosystem, as shown in Figure 5. When discussing global enterprise software vendors such as IBM, Microsoft, Oracle and SAP, there are usually no open source developer communities behind the software since their software applications hold great value and sharing their source code to the public could jeopardize the competitive advantage of possessing unique software and thus their entire existence as global companies. However, large software vendors are known to acquire smaller software companies in order to add their products to their portfolios and acquire the highly relevant competence of the workers. Therefore, if getting acquired by a larger player is on the agenda of the owners of an acquisition target company for business or personal reasons, starting collaboration with the potential buyer is a good way to increase knowledge about their company (Popp & Meyer, 2010, s. 154).

In the software ecosystems of global enterprise software vendors, the partners that can also be counted as competitors are often classified as system integrators because of their capabilities to provide services and products of their own as well, as opposed to exclusively the vendor's offering (Popp & Meyer, 2010, s. 154). In many cases, the system integrators provide comprehensive solutions to their customers that consist of both products and services. The part where the actual software vendor steps in may be relatively minor in the overall solution. Additionally, as shown in Figure 5, the software vendor might provide education on their software to the system integrators to improve chances that the system integrators' consultants would recommend their software to their customers. After all, in most cases the system integrators' consultants have several options they can recommend to their customers, as opposed to basic second-tier resellers that either convince the client about the software vendor's portfolio's suitability to the customer's business problem, or do not win business.

Usually in global software ecosystems there is plethora of companies that can be categorized as common software partners of the vendor in the middle of the ecosystem. The details of the role of the software partner naturally depend on the nature of the partner company in question, its expertise, customers and similar assets. However, the main goal is to leverage the opportunity of the partnership to increase revenue since presumably they are commercial players. Thus, when discussing the general level software channel partners, in most cases the services provided to the software vendor consists of sales related activities. By partnering up with these sales-oriented channel partners who resell the products of the ecosystem vendor, the software vendor can indirectly penetrate markets and reach customers unreachable without these domain specific channel partners. (Jansen & Gusumano, 2012)

These sales related activities can consist of generating leads, selling the vendor's software solutions as they are distributed or selling complementing parts to the software solutions of the vendor (Popp & Meyer, 2010, s. 152). On a more detailed level, the partner can sell the vendor's software to their customers, provide presales and sales services to the software vendor or provide post sales activities such as support and maintenance to the software vendor's products. As a return, the software partners might receive opportunities such as first mover advantages, cheap licenses, financing and co-marketing services from the software vendor (Popp & Meyer, 2010, s. 152).

As mentioned earlier, in theory all tasks required to successfully running a software business, that are shown in Figure 4 can be outsourced to a business partner in the network if it is strategically justified and beneficial to the software vendor. To enable this, software vendors may have several so-called value-added distributors (VADs) as first tier partners that are responsible for several quality-ensuring activities, such as educating the second-tier partners about their products' details, updates and such. Managing and maintaining the obligatory certifications of the second-tier partners that are required to resell and distribute the software solutions of the vendor may also be in the responsibility of the value-added distributors, as shown in Figure 7.



ARROW

Figure 7. Arrow ECS (Value-Added Distributor) Business Model (Arrow ECS, 2013)

As shown in Figure 7, a VAD might also provide additional value-adding services to the second-tier partners, such as sales support, technical support, support in licensing and configuration, marketing and logistics. Figure 7 illustrates the business model of Arrow ECS. Arrow ECS operates as one of the value-added distributor companies for whom IBM has outsourced its partner management and channel sales enablement related tasks to (Arrow ECS IBM education, 2017). As shown in Figure 7, the value adding services that Arrow ECS offers to IBM business partners build up a comprehensive service portfolio with basically everything they may find relevant to support their businesses. However, naturally relationship management is also required from the software vendor itself since the VADs do not have authority over the vendor.

Most importantly, the VADs ensure that the second-tier partners that are in their responsibility have the required certifications and that their competence is sufficiently up to date to enable providing high quality services to their customers. By utilizing VADs, the software vendor can outsource a significant amount of important, yet relatively operations-focused tasks to companies that specialize solely on them. There are many companies like this around the world and large software vendors may have several of them in their service.

3.5 Channel sales in software partner ecosystems

“The job of the channel(s) is to find, win, make, keep, and grow happy customers. In other industries, the channel may have more obligations such as importing, warehousing, logistics and repair, but as the software industry operates with virtual products, the channels are primarily engaged in extending the value of our products and in marketing, sales and support” (Bech, 2015, s. 35)

As illustrated in Figure 4, software businesses and customers have goals that they are aiming to achieve when acting strategically, as assumed when modeling behavior of the entities operating within a commercial software ecosystem. The main goal of the entities is to complete all of their goals as efficiently as possible, in theory regardless of the ways in which they are being completed (Yu & Deng, 2011). While this model is theoretical and does not take into account any subjectivity, such as habits or personal opinions of the people operating within the organizations as employees, it applies; on a theoretical level, it does not matter how the set goals are achieved.

As an industry term and sales and distribution strategy in the software business of large enterprises, “channel sales” refers to selling software, hardware or related services through

third-party organizations (Popp & Meyer, 2010, 157). In other words, a specific, usually large, software vendor outsources tasks as illustrated in Figure 4 related to sales, new client acquisitions, product or service deliveries, subscription and support renewals to third-party organizations. These are usually smaller companies operating on a related field and holding a certain segment of the software specific market by geographical location, specific core competence or maintaining strong relationships with their customers (Weiblen, Giessmann, Bonakdar & Eisert, 2011).

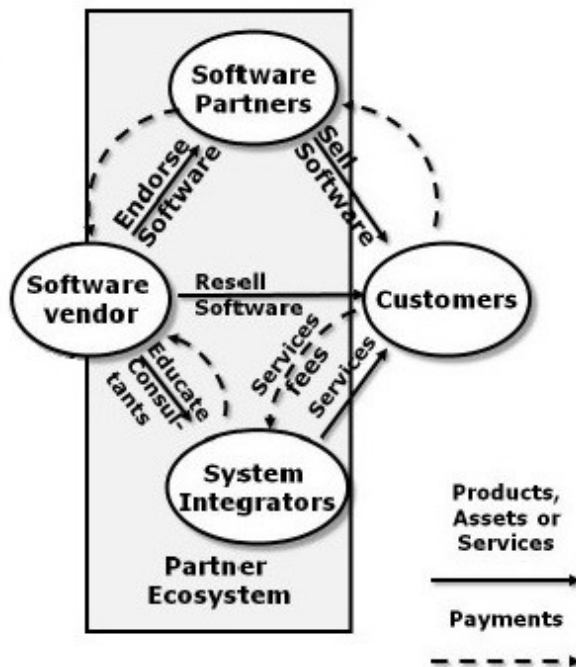


Figure 8. Exchange of products and services in the Partner Ecosystem (Popp & Meyer, 2010)

In Figure 8, the flow of products, assets and services is added along with the cash flow indicators. In this model, the software vendor in the middle is utilizing both direct sales and channel sales as revenue drivers, which is the usual strategy in the software business, as oppose to consumer retail business where a manufacturing company often chooses one of these approaches.

The model illustrates a partner ecosystem where the channel partners interact with the software vendor's customers by selling software, licenses, support and related services to customers who are the end users. Naturally the end users are customers to the software vendor's partner companies as well, as they technically are to the original software vendor also, even if all the transactions are made solely between the partner company and the customer. However, by allowing the partner companies to hold the customer relationships and execute sales and

customer fulfillment related activities, the software vendor is utilizing channel sales as a revenue driver in addition to their own sales efforts, which is presumably targeted only to the most important account segment.

Targeting sales force and account management related activities only to the most important customers allows the vendor to focus significantly more resources into the core business activities such as product and process development. In addition, the risk is divided across the ecosystem; resources wasted in pursuing business leads that eventually do not end up to be won are out of the specific partner's resources instead of the vendor's. For example, preparing offers for governmental procurements under public bidding reserves a considerable amount of professional resources and is usually relatively improbably won, since the software vendor might have many partners offering the exact same solution to the customer's business problem and the choice of supplier might be based only on minor details. The software vendor might not have interest in which one of its partners wins a specific bidding, since it will gain the same revenue regardless of which partner supplies the software. In addition, it does not have to bind expensive professional resources into preparing the offer.

Obviously, the partners must be constantly kept up to date by the vendor with all the product details, updates and other relevant information about their offering portfolio. For this reason, in order to achieve approval to resell the products of the original software vendor, the partners are obligated to withhold different sorts of certifications determined and approved by the software vendor (Babiy; Janicki; Wassyng; Bogowicz; & Koczkodaj, 2010). Different certifications may apply to different product families or groups and they can be divided to selling and technical certifications. In other words, they may be divided into pre-sales and after-sales certifications. By these obligatory certifications, the software vendor ensures that its partners can fulfill customer needs and as well as provide satisfactory support to them after the product has been implemented to the customer's daily usage (Babiy, Janicki, Wassyng, Bogowicz, Koczkodaj, 2010). The importance of this cannot be excessively highlighted, since a frustrated end user is likely to not only switch the software provider, but the software itself. In this case, the alternative is most likely a product that is owned and distributed by the original software vendor's competitor.

As Figure 5 shows, the software vendor also provides training and education to its partners to ensure their competence. However, as Figure 4 indicated, training is also a general task. There is no rule stating that even this task should necessarily be completed by the software vendor itself. An exception to this general assumption is introduced in the "Roles of companies in a

software ecosystem” section, where the terminology related to different types of partners that software vendors might have as parts of their ecosystem is opened.

3.6 Goals pursued by software partner ecosystems

Over time, the formulation of software ecosystems has always been based on opportunities for all entities involved in the ecosystem to achieve results otherwise unachievable. Even after adapting partnership in a specific software ecosystem, it must enable results that the entities could not achieve without being a part of the ecosystem, since in theory continuing the collaboration is voluntary for every party of the ecosystem. The usefulness of being a part of a specific software ecosystem can be rationalized by providing evidence that a certain set of goals is achieved. In other words, for the membership in the ecosystem to be beneficial, these goals or the most relevant ones of them must more accessible as opposed to working independently (Popp & Meyer, 2010, 131).

In a simplified view of reality, a software ecosystem’s activities are targeted to access external resources and capabilities. Benefits brought by these are the primary motives for participating in the ecosystems (Kude;Dibbern;& Heinzl, 2012). For simplicity’s sake, the desired benefits can be further subcategorized into financial goals, customer engagement related goals, product development related goals and network effect or market related goals (Popp & Meyer, 2010, 134). Naturally it depends on which entity’s point of view is discussed and the nature of the software ecosystem itself, when determining which goals are being pursued as primary ones and how are they meant to be reached with the help of the ecosystem.

3.6.1 Revenue-driving and cost-cutting

The financial motivation for building an ecosystem is both cost savings through outsourcing as well as monetizing on the ecosystem. Monetizing on the ecosystem stands for creating new or increasing existing revenue streams by leveraging the ecosystem (Popp & Meyer, 2010, 135). The software vendor’s goal is to create and increase profit and growth over time since it is a commercial company with the ultimate target of profitable business. Expanding the partner network to reach new markets and industry niches enables major growth with only a fraction of the resources and business risks that would be required to conquer those markets with in-house resources (Popp & Meyer, 2010, 136).

In other words, a major part of the software vendors’ financial goals are related to major cost savings. In theory, it would be able to conquer the partners’ markets by itself as well by multiplying the resources in its sales organizations. With the same logic, everything could be

done in-house. However, history has proven that outsourcing tasks outside the core competitive advantage can result to better performance. In technology vendors' case, the core is achieving product leadership against competition in the respective area(s) of software solutions they compete in. (Bech, 2015, s. 38)

So, it could be argued that in the end, the software ecosystem is about outsourcing when it comes to the software vendor's point of view (Popp & Meyer, 2010, 136). There is a variety of tasks, as shown in Figure 4, which can be outsourced to the ecosystem. These tasks include presales activities, sales activities, product distribution and post-sales activities such as support, maintenance and license renewals. Profits gained by leveraging current clients by upselling additional features in a form of software or services are naturally also divided between the partner and the vendor.



Figure 9. Examples of revenue streams in the ecosystems (Popp & Meyer, 2010)

When it comes to the software vendors' business partners' point of view, there are several financial reasons to adapt the vendor's products in their portfolio instead of developing and selling solely their own software solutions. By adapting a large player's software portfolio, even smaller vendors can start creating revenue since they do not have to spend resources on product development. Developing highly complex enterprise applications to saleable comprehensive solutions is not a walk in the park. As proved by the global players dominating the market today, the product portfolios of the vendors are usually results of even tens of years of product development and acquisitions, billions in R&D investments, trial & error, blood and sweat.

Product development is not the core of these channel partners, customer intimacy and operational excellence is (Bech, 2015, s. 38). According to arguments made before about outsourcing functions outside the core, the partners in a way take advantage of that by outsourcing the product development and lifecycle management to the vendor.

The business partners can add their own modules and extensions to the vendor's solutions to customize them to fit the client's environment perfectly, but they are still not obligated to develop the platform themselves. This means that the financial goal of the partners is to enable selling a massive product portfolio without having to spend a massive amount of resources in its development. As Figure 9 illustrates, the customer pays the partner for the software and related services and the revenues are shared with the software owner, the software vendor. The partner's profit consists mostly from consulting hours they sell, but partially also from the margin they add to the price of the software from the vendor. As in business usually, the amount of the sales margin on top of the purchase price is for the reseller to determine. The partner's price and the profit margin combined determine the price of the software procurement to the end customer. The cost of the project work related is usually a different discussion, the cost might depend on various factors. (Popp & Meyer, 2010, s. 137)

3.6.2 Product leadership through co-innovation

“Co-development can increase the return from internal R&D by leveraging partners' capabilities” (Chesbrough & Schwartz, 2007)

Even though the software vendor offers a comprehensive product portfolio, the solutions cannot possibly fulfill every business need in the market, since each industry and customer within those industries has a unique business environment and factors affecting it. All business partners that act in the ecosystem and wish to differentiate themselves are bound to offer their own, more specific, competence from solutions in a specific business area (Ceccagnoli; Forman; Huang; & Wu, 2012). In addition, they have the best knowledge and insights from the market segment they hold and thus are bound to be the most competent in developing complementing extensions to the vendor's platforms to meet the specific requirements of their customers (Ceccagnoli, Forman, Huang, Wu, 2012).

Additionally, the partners might hear valuable feedback and development ideas from their local customers and act accordingly, whereas the vendor most probably only has bandwidth for their largest customers globally. In some cases, the customers might not be able to form their ideas or underlying problems into concrete development ideas. However, the partners, at least the

most competent ones, are most likely the best source for the most valuable development suggestions for product development. If their voice remains unheard, a great asset is left unutilized and they might even grow frustrated for the lack of perceived appreciation. (Bech, 2015, s. 70)

The solutions that are combinations of the vendor's platform and extensions developed by a partner with core competence in a specific market are the most probable to fulfill the customer's business needs in the most comprehensive way possible (Popp & Meyer, 2010, 140). The partners might also be encouraged by the software vendor to co-innovate with each other and even with end customers, in addition to co-innovating with the vendor. However, since usually enterprise software products are not open-source based, to ensure the final product's quality, strict rules may apply when developing extensions and complementing parts to the software vendor's products. Additionally, the vendor should share their development plans, also known as "road-maps", ahead of time with the partner ecosystem to enable them to make suggestions and prepare for the upcoming changes. (Bech, 2015, s. 70)

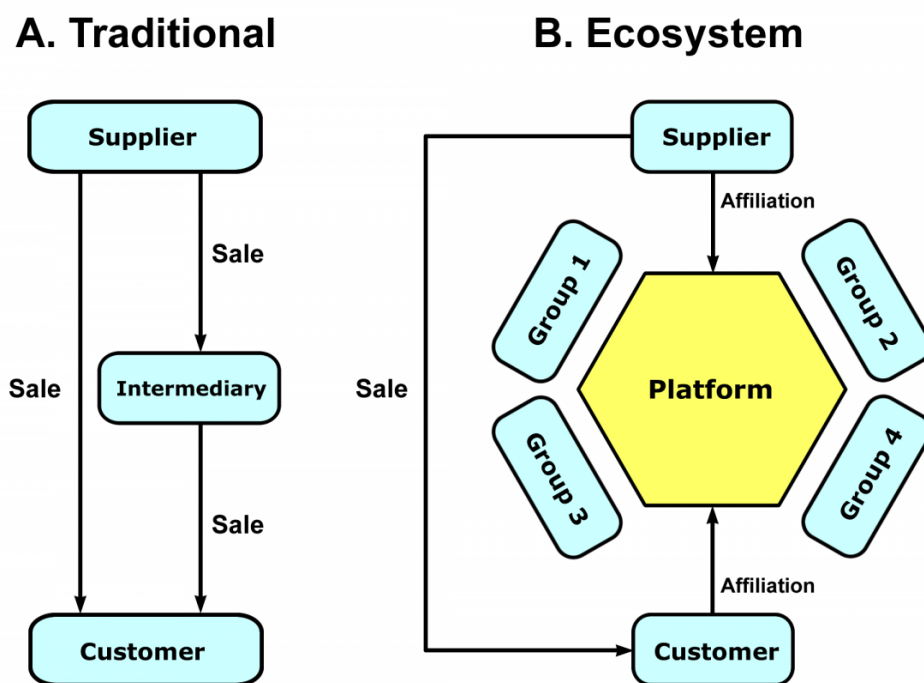


Figure 10. Traditional vs. ecosystem business model approach (TIM, 2010)

As illustrated in Figure 10, there are multiple Groups (partners) working around the Platform (vendor's offering). Ultimately, all these partners might serve a different customer segment or market niche, offering the vendor an indirect reach these multiple markets with market-specific products that are attuned by these partners for the needs of their respective markets. The ability

of these niche developers to influence the vendor depends on the vendor governance model. (Jansen, Peeter, Brinkkemper, 2013) (Manikas & Hansen, 2012). Paired with the cumulative knowledge of all the different markets they serve, the collaborative efforts of all the groups surrounding the technology vendor have the potential to co-innovate a much more comprehensive product offering to serve any industry and business need, than any closed entity could. Software vendors might also engage in co-innovation if their offerings complement each other, but do not necessarily compete. An ecosystem with this approach is best described as a networked organization, where the vendor has a rather central role, but the external developers provide important parts, often the most differentiating and valuable parts of the functionality (Bosch & Bosch-Sijatsema, 2009), (Popp & Meyer, 2010, s. 140).

Product leadership was stated to be the single most important priority in achieving competitive advantage for software vendors in Figure 6 by Bech. In an ecosystem, where co-innovation works in aforementioned way, reaching this goal is easier. As the software ecosystems function around digital products, the limitations of geographic proximity are no longer issues as the vendor can provide tools for collaboration regardless of time and place. If executed properly, the vendor and the partners can achieve a culture of collaboration. In best case, it can generate a constant stream of innovation as cumulative knowledge and shared diversity power co-creativity over time. Obviously, in this collaborative operating model, temporal, geographical and socio-cultural distance might have an impact among the development organizations (Holmstrom, Conchuir, Ågerfalk, Fitzgerald, 2006). However, these challenges are not implications of the ecosystem model per se; the same exact challenges can be faced by multinational corporations internally as well. Additionally, this strategic alignment increases the chances that the co-development relationship between the vendor and the partner can be sustained over time. (Boley & Shang, 2007) (Highsmith, 2002) (Chesbrough & Schwartz, 2007)

One of the most dominating current trends in the enterprise software industry is moving more towards Software-as-a-Service model from traditional on-premise model. This fundamental change is expected to have major implications on the way business is conducted in partner ecosystems. But for the time being, we are still waiting what the result will eventually look like. It requires the vendors to rethink their indirect go-to-market models to some extent, but the more interesting change might follow from the partner side. They might need to develop new revenue streams through new service offerings, as maintenance responsibility and some other traditional streams return to the vendor by default. Changes will also occur in terms of what the partners' responsibility will be in the implementation process, as packaged software aims to be

easily configured to customer settings without the need for customizing code or other technology heavy procedures. (Stuckenberg, Fielt, Loser, 2011)

As briefly mentioned in the early phases stage, the open innovation paradigm has established itself more and more during the recent past. While the global corporations still hold on to their core products due to their massive monetary value, many of them have launched initiatives for completely open innovation platforms. In these communities, people can create and discuss new ideas openly while utilizing the development platforms provided by technology corporations. Examples of such are IBM's Greenhouse community and SAP's HANA Cloud Platform Community. (SAP PartnerEdge, IBM PartnerWorld, 2017) (Bosch, 2009) IBM made one the first move towards this already in 1998 by joining forces with Apache, an online community of webmasters and technologists. (Boudreau & Lakhani, 2013)

3.6.3 Strength in numbers

The network effect argues that value of a product increases along with the number of customers of that specific product (Popp & Meyer, 2010, 140). From consumer's point of view, the direct network effect is extremely relevant; the more people have mobile phones, the more an individual user benefits from having a mobile phone. In the enterprise software business from the customer's point of view, the more complementing products there are in the market offered by partners based on one vendor's technology, the more likely one is to remain a customer. Because changing the technology vendor would limit their access to all these complementing solutions that might come in necessary later. At least a comprehensive analysis should be done regarding the ecosystem of the competing technology option. All this strengthens the lock-in effect as switching costs and trade-offs grow in size. (Popp & Meyer, 2010, s. 138)

One situation where this applies perfectly is when a customer has integrated supply chain management systems with the suppliers in the chain to maximize integration enabled efficiency. Switching costs would be enormous. Logically, when having a large customer base with a single product family, it is easier to leverage these customer relationships when upselling updates, additional licenses, extensions, related value-adding services et cetera (Popp & Meyer, 2010, 141).

On the other hand, the indirect network effect comes from the assumption that widespread adoption of a product also leads to a large number of adjacent solutions and partners (Popp & Meyer, 2010, 141). In other words, as the network of partners grows in size, it becomes harder to challenge for the competitors. The vendor is able to provide a growing number of different

solutions, since the ecosystem partners constantly come up with new extension solutions the vendor is able to offer to customers via channel sales in cooperation with that specific developer partner. Moreover, the more partners an ecosystem has, the more attractive it seems to other potential partners who have not joined yet and thus it continues to increase in size.

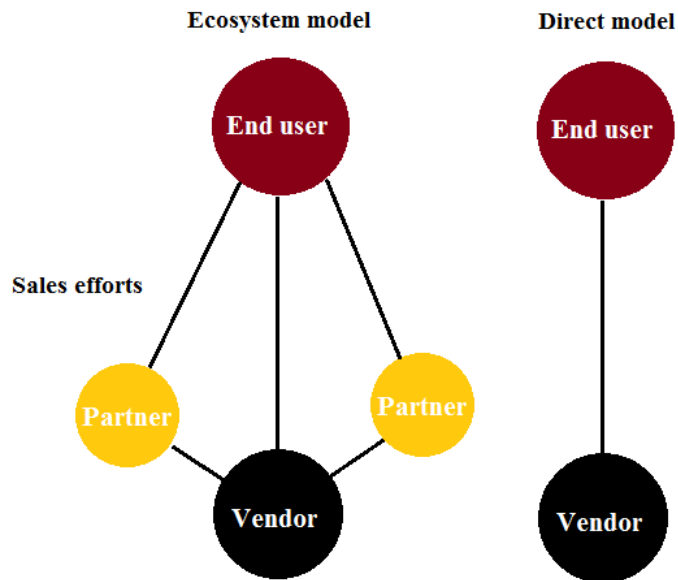


Figure 11. Sales efforts multiplier in an ecosystem model

Appearing as an attractive partner is highly relevant to the vendor's interest, since there are several global players that compete from the attention of potential partners. However, usually there is no rule stating that a partner would only be allowed to represent one vendor's products. Thus, managing partner relations is highly important for the vendors. In order to keep the partners satisfied and retain the partnership over the years, different partner strategies have been developed. These strategies might include incentive programs, rewards or even features that ultimately aim to create lock-in effect (Popp & Meyer, 2010, 143).

One of the most important strategic goals behind building an ecosystem around a company is to create an efficient sales channel that can reach markets otherwise unreachable with the current resources in functions such as sales. With a large network of business partners, via channel sales the vendor can conquer its partner's local, regional and vertical markets despite not being nor present neither represented by any own employees in these market segments (Weiblen, Giessmann, Bonakdar & Eisert, 2012).

Additionally, even within the same market segment, more sales efforts are targeted towards same prospective customers with the help of the ecosystem as they also need to acquire customers to survive as illustrated in Figure 11. Even if the customer in question would be

chosen to be served directly by the vendor, they cannot prohibit independent partners from approaching these customers. Most partners also offer other deliverables outside the software business such as consulting services that they can always sell to all customers in order to secure additional revenues outside software sales. It could be argued that overlapping work is done in vain when multiple partners in addition to the vendor direct sales efforts to same customers. However, vendors usually have a massive amount of solutions in their portfolio, and all the partners usually have different angles in their sales efforts. Additionally, software purchasing decisions from global vendors are often made by multiple people together at the customer, as they are mostly of high value and strategic choices one cannot easily or quickly revert. For this reason, it is good that many people are approached and hopefully convinced at the customer. To conclude, seemingly overlapping sales efforts do not create a channel conflict, vice versa. (Bech, 2015, s. 105)

Ultimately, value of the ecosystem for vendor perspective depends on the amount and quality of partners that can be counted as having them as primary focus. Large players in the enterprise software market have put more and more focus recently into growth and retention of their partner ecosystem. All of them have dedicated people catering for the partners as well as partner programs under which they have rules and regulations for rewarding the partners from value-adding achievements such as license sales. They organize events and trainings for partners and even give out rewards of recognition for partners that have been most valuable during a certain time period under the scope (IBM PartnerWorld, 2017; SAP PartnerEdge, 2017).

Eventually positive experiences from the partnership can also turn the partners into paying customers themselves, when they eventually need new and sophisticated solutions to run their own businesses. Similarly to pursuing lock-in effect in customers through rising switching costs, the vendors pursue lock-in effect in partners as well. If the vendor and the partner have co-innovated integrated solutions with market demand, the switching costs would similarly apply to the partners (Popp & Meyer, 2010, s. 143).

However, in the long-run the only way a sustainable partnership is formed and retained is by achieving a functional trinity; the vendor offering a best-in-class product with market demand, the partner offering high-skilled people to maximize the return of investment from the solution, and the customer being satisfied with both parties delivering the business result they wish to achieve by this investment. Additionally, all three parties of the trinity having a functional foundation for healthy communication and collaboration in the ecosystem. (Popp & Meyer, 2010, s. 202)

4 Empirical research

My empirical research section focuses on the ecosystem of one global, multinational technology company that has a very broad range of software solutions in its portfolio for multiple business purposes, industries and customer segments. Hence, it fits perfectly to the scope of my thesis. I have structured the empirical analysis section into three main topics; implications to the software vendor, implications to the partners and finally implications to the end customers. These three main categories are further subcategorized into benefits and challenges for each entity type in the ecosystem. Obviously not everything can be simply categorized to good or bad in real life. But for simplicity's sake, this is the structure of the section. After discussing the benefits and challenges from each party's perspective, I will conclude the key findings.

As the main interview question is related to comparing the ecosystem model to the simplified model, the research is conducted from that perspective. For instance, when discussing benefits for the end customer, these are benefits that come explicitly from the ecosystem model and would not exist in the simplified, direct model. Obviously vice versa with the challenges, they are brought explicitly by the ecosystem model and do not contain regular challenges any software customer might have, such as dissatisfaction with the products. The same comparison principle applies to all the sections of the empirical part.

4.1 Background to case global software vendor ecosystem

This software corporation has a global business partner ecosystem that operates as value-adding sales and distribution mechanism of their enterprise software solutions in multiple markets around the world. The company has been around for long and taken advantage of the ecosystem mentality for long as well. As result, their ecosystem is one of the most mature ones in the market. They have highly developed partner programs for managing the ecosystem, enabling selling and distribution of their software portfolio as well as rewarding the partners according to their partner policies. Even though my research is only based on the Finnish market, in this case the principles are very similar in other markets as well. After all, the go-to-market strategy and the rules of the partner programs are made on global and/or EMEA level and then cascaded into local markets with basically no room for interpretation.

Even though the respondents were from different parts of the ecosystem, many of them had earlier worked in other entities among it, such as the software vendor itself and other partner organizations. Additionally, they possessed more than 15 years of tenure in the business on average. Even though they all worked in the same ecosystem at the time of the interviews, many

had also experience from other vendor ecosystems and thus did not have to limit their answers only to descriptions of this ecosystem's practices. Because of these reasons, all of them possessed comprehensive knowledge about the business model and its implications along with from other perspectives than their current positions as well.

4.2 Implications to software vendor

In this chapter, I will compare how the respondents saw the ecosystem impacting the software vendor. To elaborate, what details they considered significantly different as opposed to the simplified, direct service model from the software vendor's perspective. After all, figuring out the key differences between ecosystem and direct model is the main scope of this thesis.

4.2.1 Benefits

As discussed in the literature section, one of the main goals for the vendor is to gain more business with the help of the ecosystem, which was confirmed in the interviews:

“The partners help me discover opportunities for new business, which is crucial because my time is limited to managing few of the most important accounts I have. I am working with five partners and obviously, their collaborative efforts provide a much greater market coverage than could be achieved by myself. Additionally, the compensation model is structured to encourage indirect business. In fact, by outsourcing most of the work to the ecosystem in addition to receiving new sales opportunities, we could even give up part of the profit margin and this model would still make sense.” (Channel Manager, Vendor Company #1)

This aligns with the arguments presented in the “network and market” chapter by Popp and Meyer; the market coverage can be increased dramatically through partner ecosystem when utilized correctly in the aforementioned way. Additionally, the business sense of outsourcing tasks to the ecosystem received appraisal both in literature and interviews. As proposed in the literature, customer intimacy is highly important for the partners (Bech, 2015) for the reason that they mostly make a living out of consulting work as opposed to software sales:

“Sales efforts are very important for them since reselling the vendor's software licenses might constitute maybe 20% of their overall business, rest is earned by selling working hours of their consultants. For this reason, long-term customer relationships are even more important for the partners than individual sales people at the vendor. To ensure customer satisfaction, the partners often provide technical support directly to the

customers, even if this would actually fall under the responsibility of the vendor from contractual perspective. This ultimately removes administrative workload from me and I can put the hours to more value-adding work.” (Channel Manager, Vendor Company #1).

While most business literature highlights the importance of long-term customer relationships in most industries, sales compensation models of large software enterprises might sometimes encourage short-term wins over long-term relationship nurturing due to quarterly performance pressure. Additionally, the vendors often trust in product leadership instead of customer intimacy, like pointed out by Bech earlier. The partner companies usually do not operate similarly as they are often smaller and not liable for reporting quarterly revenue performance, that mostly consists of large software transactions. (Channel Manager, Vendor Company #1)

However, this quotation supports the arguments presented in the literature review, that the partners cannot make a living only from license sales. Often majority of the profitable revenue for them comes from selling consulting work and other professional services they offer. Depending on the position of the partner, they need to come up with different services they can offer to the vendor, other partners or end-customers in the value chain to justify their existence and make a living. As stated in the literature, outsourcing tasks outside the core makes sense for the vendor in most cases and is made possible by the ecosystem. The interviewees aligned with literature in this argument:

“The greatest value we as a VAD bring to the vendor is that they can outsource multiple tasks related to partner management to us. Such as product training, marketing activities, business development, administrative duties and so forth. Attempting to handle all of this in-house in each country would widen their organization too much.” (Partner Manager, VAD Company #5)

In chapter 3.6.2, product development through co-innovation, Popp & Meyer argued that co-innovation in the partner ecosystem at its best can be more efficient than within any closed entity. According to Project Manager at Company #3, this is possible and makes sense, but figuring out who the high contributors are in a global ecosystem obviously takes time and therefore establishing that position as a partner is not easy nor fast. As Company #3 could be counted as “The Star” in Bech’s partner categorization framework (Bech, 2015, s. 94), the principle argued in the literature was confirmed by the Project Manager at VAR Company #3:

“In a direct model, customers create a lot of noise and it is the vendor’s responsibility to filter the meaningful messages out of it. In an ecosystem model, the vendor knows which partners’ messages are always worthwhile and truly add value. When the vendor is closely collaborating with a handful of these high-level contributors, the value from co-innovation in the ecosystem can reach its peak. Even if the innovations were primarily addressed to certain customers, in an ecosystem model at the end every customer can benefit from them. Especially as we move more and more towards packaged SaaS solutions.” (Project Manager, VAR Company #3)

It was argued in the literature by Bech that only 5% of the partners are high contributors – “The Stars.” While the actual percentage without a doubt varies and is subject to interpretation, the key for success according both Bech and the interviewee was the same. It is to identify these stars from the ecosystem and making sure they are engaged in conversations with the right people at the vendor. This should be one of the top priorities at every ecosystem driven vendor on their way to success. The partners who reach this position have deserved it, because there are no shortcuts (Project Manager, VAR Company #3). (Bech, 2015, s. 93)

4.2.2 Challenges

“The biggest challenge brought by this business model in my role for me personally, is that the partners are often not exclusive with us, but also represent competing technology from other vendors. In these situations, the partner might not position our solution as the primary option in the fear of playing themselves out of the project, but tries to grant any wish the customer might have about the technology choice. The problem is, the customer might not know which technology would best serve their needs; the partner should challenge the customer with our offering’s benefits against the competition if they are considering something else.” (Channel Manager, Vendor Company #1)

This issue was also addressed by Bech and discussed in chapter 3.3.2 explaining software partnerships. Both strategies, representing only one or multiple technology vendors, have their benefits and challenges. However, the literature reviewed for this thesis did not elaborate much further. It only scratched the surface regarding the complexity of this issue in real-life business situations. More in-depth knowledge about the implications of this strategic choice was discovered in the interviews:

“The partners might not want to be exclusive for anybody in the fear of being labeled as sole ambassadors of one particular vendor and nothing else. What if the customer then wants to consider other technologies? They might by default take the conversation somewhere else, even if this partner would have been trusted by them before and could be perfectly capable of offering other technologies as well. Often they would rather play it safe and try to appear almighty in the eyes of their customers without too much commitment to any single vendor.” (Channel Manager, Vendor Company #1)

Partners that represent multiple technology vendors put the original vendor in a difficult spot and the purpose of the trinity might not be fulfilled as supposed to. The vendor might not want to involve the partner in a sales cycle in the fear of them presenting other options to the customer behind their back, after establishing relationship with the customer with the vendor’s help.

“Even if know-how of some particular (multi-vendor) partner would be beneficial in convincing the customer to purchase the solution, it is often natural that the vendor would rather involve an exclusive partner to the conversation to make sure there will be no surprises at the finish line.” (Channel Manager, Vendor Company #1)

Even though this seemed to be a complex issue with no simple answers either in literature or the interviews, most interviewees highlighted the importance of well-spirited collaboration between the parties. Chapter 3.6.3 about network effect in the market elaborates more on how vendors pursue commitment from the partners on official levels through tangible business decisions. The interviews brought up more in-depth intangible knowledge than reviewed literature could from this issue. According to the interviews, the bottom line is that it often boils down to human behavior and choice that can only be guided with official partner programs so far. Sometimes the partner program rules might contradict with business acumen, and difficult situations follow:

“There are sometimes situations where a customer has a need and we know that a certain partner would be the best fit. But somehow another partner finds this opportunity out as well and starts pursuing it. Then we are in an awkward situation, where the corporate policy requires us to treat the two partners equally even though we know the other one is more suitable. And to make matters worse, the more suitable partner might get upset even from the equal treatment. They might feel that they have done all the good work for nothing – they still do not get anything back from the vendor in a form of preferential treatment. Finally, we should encourage new partners to pursue opportunities, but how

could we do that in this situation? It's like no matter what we do, somebody is always not going to be happy." (Channel Manager, Vendor Company #1)

In chapter 3.6.2 "Product development through co-innovation" it was argued that each partner would specialize in their own market niches with customized offerings. This would be the case in perfect world and everybody would serve their own niche. In reality, partners often compete against each other in sales opportunities for the same customers, like illustrated in Figure 11. Despite these difficult situations described in the quotation above happening from time to time, both the literature and the interviewees acknowledged that competition is crucial to ensure high quality, and usually a plethora of sales efforts must be targeted towards same customers to ensure long-term revenue streams from them.

The literature and figures can explain how the business is run on in theory, but the truth behind is more complicated. Popp & Meyer stated that the success of a software company is not only defined by its own success but by the success of its ecosystem as well. In this rapidly evolving business, keeping up alone can pose a major challenge:

"Especially in small markets such as Finland, changes impact faster in a way; if five large companies change their software buying behavior at once, that's a lot. In bigger markets, it might take longer for a change to affect you. As result, in an ecosystem business it is not enough that the vendor can change itself – they have to be able to change the partner ecosystem as well in order to embrace the market changes." (Partner Manager, VAD Company #4)

As the partners are independent companies making their own decisions, the vendors have limited power over them. They can set rules regarding reselling their portfolio, but almost everything on top of that is only motivated by mutual benefit. However, as defined earlier in the literature review, the purpose of the ecosystem is to act as an environment that enables all parties in the ecosystem to benefit from each other's existence and create value. Value that could not be captured as efficiently, if at all, without the ecosystem. Hence, it is only sustainable if everybody benefits from it. If changes happen in the market that require the vendor to start operating differently, the partners who adapt the fastest and find ways to bring value to this new setting, will be the ones who flourish in the long run.

4.3 Implications to partner organizations

In this chapter, I will compare how the respondents perceived the partners' position in the ecosystem. To elaborate, what special characteristics were related to the special position of a

partner between the vendor and the end customer. Once again, the purpose of this section is to compare the partner reality to the simplified, direct service model. As there would be no partners in this simplified reality, the goal of this section is to bring up characteristics that only exist in the ecosystem model and what they mean in practice to these organizations.

4.3.1 Benefits

“The partnership business model enables us to represent 10 strategic main vendors in addition to large number of smaller players. Because of this, the portfolio we can offer the customers basically has no limits. There are transactions which consist of bits and pieces of multiple different vendors’ offerings. We can deliver these ourselves without subcontracting competence from other partners. Due to massive scale of our extended portfolio, our customer base is also massive. Thus, we usually get invited to the conversation regardless of what a customer is looking for.” (Vendor Business Owner, VAR Company #2)

The aforementioned fact is one of the key reasons stated in the literature encouraging partner business instead of independent software provider business. Like argued in the financial goals chapter of the literature review, developing software products that could compete with global vendors is extremely resource-consuming. But as argued earlier, the operational talent is more important to the partners as selling it constitutes the clear majority of their business. Therefore, even though the product development is outsourced by default, the challenge of upholding adequate skills in all the technologies represented grows as the amount of them grows. The combined amount technologies provided by 10+ vendors is massive.

Especially when talking about more advanced technologies, where the market need is small by numbers, yet crucial in that amount, interesting situations might occur as result of people’s tendency to move around in the ecosystem:

“Especially in small countries, there might only be one expert of a certain aspect working at the vendor. If that person decides to switch to a partner organization, suddenly that organization possesses the best knowledge of that aspect in the market. The vendor has no choice but to direct the customers to them, while they look for a new person to fill the outstanding position. But that might take a while, if they even do it all. This allows the partner to hold at least a momentary local monopoly.” (Channel Manager, Vendor Company #1)

This quotation before resonates with the arguments presented in the Product development through co-innovation chapter earlier. It was argued by Popp & Meyer, that in a perfect world all the partners would serve a separate market segment with their offerings, either defined by industry characteristics or geographical factors. This is a real-life example where this utopia is at least momentarily a reality. There is only be one partner in the market who can fulfill this specific customer need, and other partners can concentrate on delivering their respective core competences somewhere else instead of battling against each other in this one opportunity.

Additionally, the vendor knows this partner is the only place to go currently with this particular need, so the customers will be automatically directed to this partner in the market. The fact is, when a partner possesses rare skills that are needed by the market, the vendors know their value:

“When you have a team with great technical competence in a partner organization, you are potentially a very valuable asset for the global technology corporations. This means, that if they are smart, they are lining at up your door to negotiate about mutual benefits of a strategic partnership. If you are not happy with the one you currently have an active partnership with, there are always other options.” (Project Manager, VAR Company #3)

As stated in chapter 3.6.3 about the network effect, the vendors recognize the value of skillful partners in the ecosystem. Software investments will not be worthwhile, if their full potential is not unleashed by capable consultants. Hence, the vendors who do not attract sufficient number of capable partners, might as well stop sales efforts of software portfolio. The business model has been around long enough for the customers to understand this. Hence, the corporations are putting lots of effort into recruiting and retaining capable partners, as mentioned in the chapter as well. This puts “The Star” partners, such as VAR Company #3, into good positions; if the current vendor does not treat them with respect, they would instantly be accepted into partnerships with anyone else due to their highly-desired skills.

“When you reach a situation where you finally have direct communication channel to the top of the pyramid – the product owner of the product you represent who probably sits in the United States - you are in a good situation. This takes years of proving your worth through the steps of the pyramid and gaining trust. But finally, it practically eliminates the implications of the organizational and geographical distance in the ecosystem from the partner perspective.” (Project Manager, VAR Company #3)

As discussed in chapter 3.6.2 “Product development through co-innovation”, the value from ecosystem from product innovation perspective can reach its peak when the vendor has

identified “The Stars” from their ecosystem and collaborates closely with them in the innovation cycle (Bech, 2015). From partner perspective, situation that Company #3 has reached is ideal; they have successfully outsourced product development, but can still influence it and make sure the developments respond to the needs of their customers – a win-win. Just as if they would all belong to the same company which no implications caused by organizational or geographical distance whatsoever. Of course, not everybody can be in the same situation. That is why Bech has determined it to be the top 5% of the partner ecosystem. Just like in all businesses, getting to the top 5% is one thing. Staying there is another.

“As the vendors realize the development potential of their ecosystems, they usually come up with initiatives to take this even further. Many of them have even launched open development platforms that anybody can use. Possibly even for free at least in the beginning to test their ideas.” (Software Consultant, Partner Company #6)

A few examples of initiatives described above were mentioned in the “Product development through co-innovation” chapter. These initiatives bridge the gap between the mentalities of the B2B and B2C ecosystem markets. It will be interesting to see in the future where these initiatives will lead. Possibly someday individuals develop applications for enterprise usage on these open platforms and free tools the same way they currently develop for consumer usage in the form of mobile apps.

4.3.2 Challenges

“Representing multiple different vendors leads to a situation where we are rarely able to drive new business with these solutions. We are more of a one-stop-shop when multiple different technologies need to be combined. Nevertheless, the vendors’ partner reward programs are usually built to reward new business, because that is the most valuable for them. Our service does not usually fall under that category.” (Vendor Business Owner, VAR Company #2)

As discussed in the “Strength in numbers” chapter in the literature review, the vendors are putting effort into rewarding the partners for value-adding work. However, Company #2 is a multi-vendor partner officially categorized as “IT Infrastructure” company. Their core business is not reselling software, but more towards technology and system integration. Figure 5 illustrated system integrators and software partners as separate entity types in the ecosystem. According to Bech, system integrators might even have strategies that are unaligned with those of the vendors by choice. It could be concluded from this quotation, that the reason for being a

different entity in ecosystem model is justified, as their business model would rarely fit the same reward program as that of regular VARs.

The partners who represent multiple vendors come with different problems when it comes to the relationship, as argued by Bech in chapter 3.3.2. It is not only problematic for each vendor, but might also cause internal debate at the partner, as they must make choices regarding the technology choice they offer for a customer need:

“Representing 10+ vendors has its challenges. Let’s say, maybe a customer need could be fulfilled equally well with offerings of four of our partner vendors. We can’t let the customer decide - giving them four different options would be confusing and they would probably go somewhere else. Because sales representatives are mostly compensated based on individual results, from time to time they might make selfish decisions. There is no guarantee that ultimately the best product would be offered to the customer. In worst case, the product represented by the winner of the internal political debate will be offered.” (Vendor Business Owner, VAR Company #2)

The topic of internal affair management at the partners was not discussed more in-depth in the literature reviewed, as the focus of that was mostly the business model as a whole and different entities in it. However, as mentioned by Bech in chapter 3.3.2 “Software partners”, they are independent companies making their own decisions. Thus, the vendors can only try to affect the partners by shaping their partner programs and rewards as discussed in the “Strength in numbers” chapter. However, internal debate behind the scenes is better than external, customer facing competition between two departments as described in the following:

”In worst case, one partner who represents multiple vendors, might have two business units offering competing solutions to the same customer without knowing of each other. This gives a very bad impression to the customer and they might lose trust.” (Software Consultant, Partner Company #6)

The bottom line is, in these competitive situations no vendor is able, if even legally allowed, to order the partner to offer their solution over the others. In these situations, only product superiority over the other options could have ensured being included in the final offer to the customer. For this reason, product leadership should be the primary concern of the software vendors, like stated by Bech in the same chapter mentioned above.

“The greatest challenge is definitely the fact that we are located between two parties, and we have to uphold great relationships to both directions. This takes more time and

effort than simply towards customers would. Additionally, it's always somewhat about compromise, since fulfilling everybody's wish it not possible." (Project Manager, VAR Company #3)

As Figure 5 in the literature review shows, there are multiple parties in the ecosystem who need to work together to make the best of it. Healthy communication and collaboration in the ecosystem are keys to success, as argued in chapter "Strength in numbers." As the amount of parties involved grows, so does the communication burden. But as argued in the literature review, the upside of the ecosystem outsizing the downside is the fundament for its existence. Thus, the effort of the multi-direction communication burden is worthwhile.

It is easy to argue that the software industry is rapidly changing. But it is more difficult to explain what will change, when and how. The vendor's perspective to a certain customer might evolve as the customer evolves over time. Often the vendors take care of the largest customers themselves and outsource the small and medium customers completely to the ecosystem. This division might change occasionally, and changes usually please some stakeholders while others are left disappointed:

"As I mentioned before, usually the vendor holds direct relationships with the most important customers, and leaves the rest for the partner ecosystem. However, if the partners grow a certain account enough, an interest might be awakened at the vendor to transfer this customer do direct account management. In these situations, the partners might feel like they are punished for their success." (Partner Manager, VAD Company #5)

Bech stated that the non-core market customers should be let for the ecosystem to handle until they prove valuable enough. According to the quotation above, problems might occur when the time for a change presents itself. Ultimately the customer is the king, and they have the power to choose if they want to continue working with their trusted partner, or hop onboard with the vendor directly. However, as discussed in the "Strength in numbers" chapter, the partner programs contain rules for engagement also for the vendor personnel, to limit its staff's ability to take actions that might be considered unfair by the channel partners.

4.4 Implications to end customers

In this chapter, I will compare how the respondents saw the ecosystem impacting the software end customer. To elaborate, what details they considered different as opposed to the simplified, direct service model from the software customer's perspective.

Once again, the purpose of this section is to compare the customer's reality to the simplified, direct service model. In other words, the goal of this section is to bring up characteristics that only exist in the ecosystem model and what they mean in practice to the end customers.

4.4.1 Benefits

“One of the clear benefits is that while a software vendor can offer a broad range of technology solutions, their true value can never be extracted without skillful consultants carrying out successful implementations. Especially when there are multiple partner options with different specializations both horizontally and vertically, the customer has a lot to choose from in each situation. Different partners specialize differently, so the width and breadth of the portfolio extends accordingly. Also, implementation and product risk is mitigated; service provider can always be replaced if the original goes under or does unsatisfactory work.” (Channel Manager, Vendor Company #1)

The benefit for the customer argued in the literature part aligns with benefits brought up by the interviewees; the customers gain greatly from the collaborative innovation efforts of the ecosystem that were introduced in chapter 3.6.2. Especially in more competitive markets, one of the only ways for partners to differentiate is to find a niche for whom to offer customized solutions and services. This continuous innovation cycle necessary for finding new markers ensures broad range of selection as argued in the literature and quotation above.

As argued by Bech in chapter 3.3.2, operational excellence is one of the most important factors for partners. In addition to differentiation through customized solution extensions, the partners can also differentiate by possessing rare, high-level skills in certain technology areas. This was also brought up by Channel Manager from Vendor Company #1. While reaching this situation is not easy, in addition to granting competitive advantage it also benefits the local customers. That is especially in smaller markets such as Finland and non-core market segments:

“Global corporations can never have all the high-level technical skills required in complex projects in each country. The resources are usually based in the largest market units, and requests from small countries such as Finland might not be top priorities. However, the partners must possess these skills order to justify their existence in the ecosystem. Thus, the customer can harvest the desired skills easier and faster from the partner ecosystem than from the vendor.” (Channel Manager, Vendor Company #1)

The benefit especially to the non-core segment discussed in the literature reviews is reflected in the interviewees' responses as well. The ecosystem extends the reach of the global

technology vendors to the small and medium segment as well, that might not get attention otherwise as the vendor's most skilled people are constantly occupied by the largest customers:

“Implications might differ according to the size and importance of the customer. The top 25 public companies might receive great direct service regardless, but the real difference is often in the small and medium segment. The partners have high motivation to provide top level service to these customers as well, because for them the consulting revenues even from small businesses are enough to make a living.” (Channel Manager, Vendor Company #1)

As discussed in chapter 3.6.2, the value from the ecosystem can reach its peak when the vendor co-innovates closely with “The Stars”, the top 5% contributors. As argued by Project Manager at VAR Company #3, the fact is that customers who are tech-savvy enough to form their ideas into concrete development initiatives the vendor could implement as such are rare. But “The Stars” can consolidate their customers’ ideas and turn them into initiatives that might benefit multiple customers at once after implemented. Additionally, “The Stars” also get their voice heard and their initiatives into right people on top the development pyramid at the vendor:

”If a customer is served by a partner who has reached the rare situation of having a direct communication line to higher levels at the vendor like described by me earlier, then the customer also has an ability to get their voice heard easier. If they have a problem or a wish, their partner can take the message further at the vendor than they probably could themselves. The partner can also interpret the underlying problem to a more concrete change request for the vendor better than the customer itself could.” (Project Manager, VAR Company #3)

Chapter 3.6.2 discussed the power of the ecosystem in terms of service portfolio width. While theory presented this in way that every developer group in Figure 10 serves their own market segments, often it is more complex in practice. Customers go through highly complex development projects with multiple areas re-engineered at once. Especially in multi-tiered ecosystems such as the case example of this thesis, the customer might be able to manage with less effort from their side, as opposed to reality without any partners:

“In many situations, the customers have large-scale IT development initiatives that cannot be fulfilled by a single consultant, but skills from multiple different are required to collaborate. As a VAD partner, we can gather these skills from the ecosystem and package them. This enables customers to access end-to-end service packages from

hardware to software and services without them having to put so much effort into it themselves.” (Partner Manager, VAD Company #4)

4.4.2 Challenges

“If the trinity does not work in a desired way and a gatekeeper-minded partner is too protective of the customer relationship they have, the vendor might remain distant for this customer. Of course, this is also result from inaction from the vendor side. Especially if the customer experiences dissatisfaction with the technology or the partner, they might want to discuss honestly with the vendor without their preferred partner filtering the message. The distance might then make this situation more difficult for the customer.” (Channel Manager, Vendor Company #1)

Chapter 3.6.3 in the literature review discussed the importance of open and healthy communication between the trinity in order to make the best out of the ecosystem. The quotation above described one possible hiccup and the negative implication resulting from inability to make this work. Situations like these put the vendor in a somewhat difficult situation. Acting over the partner might be perceived as aggressive by them. Not acting might result to the customer feeling unappreciated by the vendor. Another example of challenges in the model is the following:

“Sometimes the partners compete against each other too fiercely, stand their ground stubbornly and refuse to admit that the best result for the customer could be achieved through collaboration. Additionally, often the focus is too strongly on what brings us the most right now, as opposed to chasing long-term benefits through alliances between the partners.” (Partner Manager, VAD Company #4)

Facilitating collaboration between independent companies who by default compete against each other might not be easy. However, as Partner Manager at VAD Company #4 stated, it is doable if the VAD can get everybody onboard. Comparing to a situation without the ecosystem, where the customer would be the only one trying to organize collaboration, ecosystem customers have it better. However, it does not come without its challenges:

“The ecosystem mentality might lead to a situation, where it would not be possible to purchase everything from one address even if the customers would be willing to do that no matter what. There might be multiple different entities the customer needs to address simultaneously to package the offering they require, and nobody ensures that these parties are willing to work together openly. There might even be disputes on who gets

to be the customer-facing party. VADs might be able to do that for them, but the manual work still must be done by someone. Nevertheless, nobody is by default responsible for this arrangement or could be held accountable if the arrangement cannot deliver. Figuring out a way to make this work perfectly would bring in the best value an ecosystem ever could.” (Partner Manager, VAD Company #4)

As the ecosystem business model is fairly new as discussed in chapter 3.1 about early phases, it is still shaping and by no means works perfectly. Several interviewees argued, that while the technology and implementation skills accessible for the customers are great in the ecosystem, from time to time better collaboration models between multiple parties could be developed to further increase the quality of ecosystem customer experience. While the vendor partner programs, discussed in chapter 3.6.3, currently in place are a good initiative to facilitate the ecosystem business, some development areas came up in the interviews including the issue discussed above and in the following:

“Usually the vendor partner program rewards partners solely from new license sales and do not pay attention to soft, yet important metrics such as customer success and satisfaction. This might result to a situation where a salesman at a partner is encouraged to push new licenses by the vendor, even though reconfiguration of the existing landscape might in fact be a better idea.” (Partner Manager, VAD Company #5)

The vendor partner programs are still shaping as discussed in other quotations and chapter 3.6.3. Possibly some softer metrics are being developed by vendors, but at the time of the interviews none of my subject matter experts were aware of such. Software asset management consulting that was discussed in chapter 3.3.2 is a recommendable course of action in these situations. Especially to avoid the worst case described in the following:

“The ecosystem model can lead to a situation, where a customer has multiple contracts in place with the vendor and multiple partners from their engagements in the past. They have different support providers. As result, development activities are not only hindered by the complexity of their IT landscape, but also the complexity of their agreements and their effect on each other. In worst case, a software salesman under performance pressure can even try to take advantage of the customer not understanding their license portfolio. The customer might then purchase unnecessary stuff in the fear of a license audit. In these situations, SAM consulting that we provide is very valuable.” (Software Consultant, Partner Company #6)

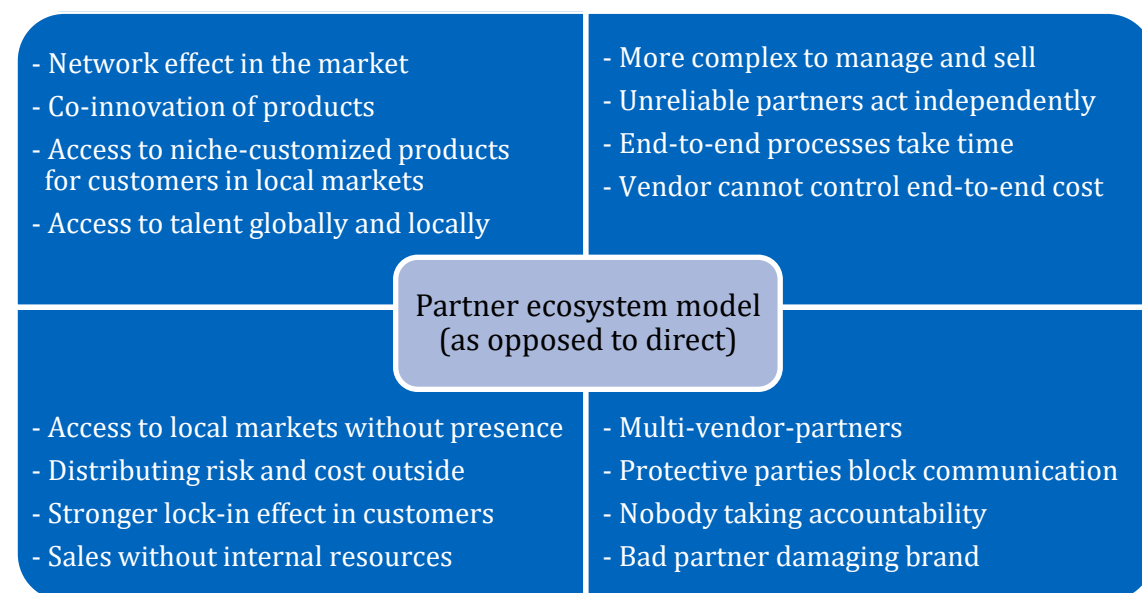
4.5 Conclusion from the interviews

The interviews provided great insights into practical matters related to the ecosystem business, which were not as easily discovered from the literature. The ecosystem business is complex and often leaves room for human consideration, decisions and even errors. While the ecosystem business model enables many possibilities for the customers, the partner ecosystem and the vendors themselves, it does not come without its challenges. The interviewees brought up plethora of benefits, but also multiple challenges. The long experience and multiple roles in the business my interviewees had was clearly visible; they could look at the business model as big picture, and did not get stuck in their own perceptions or positions.

One interesting remark was that the interviewees did not express opinions or experiences that would have contradicted with one other. In other words, they did not seem to disagree with each other about anything. Many expressed same sort of benefits as well as challenges. From this, it could be concluded that the ecosystem model of my case company was fairly established as everybody had had the time to gain similar experiences. Additionally, nothing that was found from the literature had strong miscorrelation with something the interviewees expressed. The interviewees provided great background information about practical matters that occur behind the processes that were described in the literature part.

Strengths

Weaknesses



Opportunities

Threats

Figure 12. Summary of the ecosystem model in a SWOT matrix format

5 Discussion

5.1 Answers to research questions

The research question for this study was highly generic on purpose; to be able to explore the ecosystem software business from a wide perspective. Additionally, as there are multiple levels of entities in an ecosystem, all their perspectives were included to achieve a more comprehensive understanding of the business. Key findings from the literature review as well as empirical research are summarized here and elaborated along with additional findings that presented themselves during the process.

5.1.1 Main RQ: What are the implications of the ecosystem business model?

The main research question was about exploring the implications of the ecosystem business model in enterprise software context. In the context of this thesis, the implications are by default defined as something that follows the business model itself and would not exist otherwise. For instance, a customer who is unhappy with software they purchased is not an implication of the business model; anyone can have unhappy customers, and it is not related to the operating model. However, a customer's unhappiness with multiple companies pushing the same exact solution is; such a situation would not occur in the direct model. To summarize, the questions are asked in the context of comparing the ecosystem model to a simplified, direct business model which also exists in real life. The main research question is further subcategorized into two sub-questions looking at the topic from different perspectives. These sub-questions were also highlighted especially in the empirical section question selections.

The first sub-question looks at the topic solely from business-making perspective; how does this business model work, how and why does it make sense and what are the business reasons for implementing such a model in enterprise software business in the first place? In other words, the first research question dives deep into justification of the business model itself, as opposed to sticking to the simplified, direct business model where everything would happen under one roof. Whereas the second sub-question looks closer to the implications of the business model after it has already been established. What has followed now for each party after we have lived in this reality for a reasonable amount of time? Both questions focus on the entire trinity of the model; the vendor, the partner and the end-customer perspectives. Together these two sub-questions aim to the answer the main research question with the help of findings from the literature review and empirical research conducted for this thesis.

5.1.2 Sub-RQ 1, The Cause: What is the business justification behind the ecosystem model for sales, distribution and services for the end-customers?

The ecosystem mentality has proven itself as the best practice in the global enterprise software industry over time. All the largest vendors in the industry have adopted the model; SAP, IBM, Microsoft and Oracle. There seem to be no respectable competitors of same scale in the market who would have not implemented a similar operating model. (Popp & Meyer, 2010). The primary goals justifying the business model were subcategorized into three different areas in the literature review and the same division was visible in the empirical part as well.

First off, financial goals in the sense of cutting cost and mitigating risk through distributing monetary risk to the ecosystem. In technical sense, also monetizing on the ecosystem through partner-enabled sales falls under “financial goals”, but this topic is further discussed in the third section of this chapter. (Bech, 2015, s. 38) Risk mitigation is achieved by outsourcing multiple tasks to the ecosystem, of which many could be counted as non-core activities for a company. The ecosystem enables at least partial outsourcing of activities such as sales, distribution, parts of customer-specific product development, customer service, software asset management and micro-development without the fear of losing competitive advantage. (Popp & Meyer, 2010, 136).

With the help of the governance model and partner programs launched by the vendors, it is not possible to make the vendor obsolete despite it remaining on the background in multiple situations. In theory, the vendors could outsource all the aforementioned activities to the ecosystem and only concentrate on achieving and retaining product leadership through development efforts. However, the industry best practices discovered with time, introduced in the literature review and confirmed in the empirical section, agree that at least for the time being it makes sense to retain direct relationships with core-market customers and outsource heavier in the non-core market segment. (Bech, 2015) Especially the possibility of outsourcing administrative tasks to the partners was highlighted by the representative of Company #1 in the interview.

Secondly, product leadership, which should be the primary goal for the software vendors (Bech, 2015, s. 38). While the vendor has primary responsibility of developing their core products and partners mostly only develop their own extensions of top of that, the vendor can still leverage the cumulative competence of the ecosystem to secure best possible results. Customer-specific extensions are important in capturing value from non-core markets, but there is an even

larger justification behind as well. Bech argued that approximately 5% of the partner network consists of “The Stars” that bring the most value to the vendor and thus the ecosystem as well. Chapter 3.6.2 presented how “The Stars” should be included in the discussion when it comes to product development.

Attempting to listen to all the partners, let alone end-customers, would not be possible due to the overwhelming amount of invaluable noise. “The Stars” have the competence to listen to their customers, filter and consolidate these messages into valuable and concrete development suggestions that benefit multiple customers at once. This was also confirmed by a representative of such company, Company #3, in the empirical section. They have earned the position as “The Star” with years of proving their value repeatedly, until they have finally reached a position where they are always heard and automatically included in the conversation. By co-innovating with “The Stars” that bring their out-of-the-box competence as well as messages from the customers themselves, the vendor is in a best position to achieve the product leadership highlighted in the literature. This is much more challenging for a closed innovation entity as they only have their own point of view and lots of unqualified customer noise to draw conclusions from. (Bech, 2015) (Chesbrough, 2003)

Thirdly, network effect enabled by multiple parties benefiting from success of the vendor’s portfolio. In the enterprise software business, from the customer’s point of view, the more complementing partner products and potential as well as skilled service partners there are in the market based on one vendor’s technology, the more likely one is to remain a customer. Changing the vendor would limit their access to these complementing solutions and increase maintenance risk (Popp & Meyer, 2010, 141). From vendor perspective, the ecosystem acts as an efficient sales channel for markets otherwise unreachable with the current resources. With a large network of business partners, the vendor can conquer local, regional and vertical markets despite not being physically present neither represented by any of their own employees in these markets (Weiblen, Giessmann, Bonakdar & Eisert, 2012). This lets the vendor focus internal efforts on core market customers who are usually the largest ones, but still generate sales in all the markets. The importance of this was also highlighted in the interview by Company #1 representative.

5.1.3 Sub-RQ 2, The Effect: What are the implications of the ecosystem model that follow for the software vendor, partners and end customers?

The answer to this second sub-question is further sub-categorized into separate discussions from each party's perspectives for the sake of clarity, much like the empirical section was. As mentioned, the second sub-question does not focus on justifying the business model itself anymore like the first sub-question answer did, it merely describes the implications of living the ecosystem business model reality with its benefits, challenges and practical matters present. While the literature provided great answers the first sub-question and they were merely complemented by the empirical research, this second sub-question was better answered by the interviews. Much of the implications happen "behind the scenes" and never reach public knowledge let alone business literature about the topic. They remain intangible knowledge within the industry that can only be discovered by a deep-dive past the polished front.

Software vendor

The benefits of the ecosystem model for the software vendor were comprehensively described in the first sub-question answer, divided into three main categories and elaborated further with examples, since business justification of the model for the vendor is the foundation for its existence in the first place. For this reason, the benefits for the vendors are not repeated in this chapter.

However, the ecosystem model also brings its own challenges that would not exist in similar formats in the simplified model. First off, the vendor must deal with an ecosystem consisting of independent partners. While their independence is positive in terms of outsourcing risk to like discussed before, it also means that the vendor is in no position to make direct orders. In fact, even attempting to manipulate the partners would be illegal in many situations.

Since the principle of the ecosystem model is that end-to-end offers require collaboration between the vendor and at least one partner, the situation might get complex. This issue was elaborated by Company #1 representative. The ecosystem has both exclusive as well as multi-vendor partners. With multi-vendor partners, the vendor can rarely be entire certain that the partner does not have an agenda of their own that might not align with that of the vendor's. In worst cases, they might even choose to position a competitor solution at the finish line.

To conclude the issue in a form of a figurative comparison to what the situation might compare to in a direct model with no partners whatsoever, it compares to a crucial team member being secretive and unreliable. To make matters worse, this is without the team leader being able to

do anything about the situation other than hoping that member has no hidden agendas conflicting with the team agenda and they won't betray the team at the finish line. Additionally, the team leader could not even determine the cost of this one team member nor influence it in any way. To elaborate further, this team might even have multiple crucial members as problematic as the one mentioned above. Perhaps the team leader would know how the project should be conducted, but the team members refuse to act in a desired way in their power-struggle. In worst case, these difficult team members might hurt the team brand in the eyes of the customer to irreversible extent. (Bech, 2015) (Channel Manager, Vendor Company #1)

Business partners

For the partners the primary implication of the ecosystem is the most crucial out of the tree main entities of the trinity; it enables their entire existence as such. Without the ecosystem mentality, these companies could still exist in theory without the vendor even acknowledging their existence. However, it would be much more challenging for them as they would always compete against the vendor itself in services they could still provide such as software consulting. Furthermore, the vendor could make it difficult for these independent challengers as opposed to supporting them in multiple different ways, like they do in the current model. As discussed in chapter 3.6.3, the vendors have partner programs in place designed to support the them, increase their competences, drive their businesses and retain them as partners.

Because the vendors are willing to outsource multiple functions to the ecosystem, it opens plethora of business opportunities that would not be there otherwise as discussed in chapter 3.4. Multi-vendor partners might represent 10+ vendors and thus access basically an unlimited portfolio of solutions without having invested anything in the actual product development, as elaborated by Company #2 representative. They might also possess rare competences in their local markets not offered by the vendor there and thus hold at least a momentary monopoly for customers in need of that particular skill. The most high-valued partners, "The Stars" can reach a situation where they basically have no downsides left of being independent from the vendors, but all the upsides enabled by it. (Bech, 2015) (Project Manager, VAR Company #3)

In a straight-forward reality where a partner collaborates with one vendor in a sales cycle and completes a software transaction along with attached services sold to a customer, there are no complications. However, the reality is often more complex and the parties involved might have contradicting agendas. In these situations, being independent from the vendors who push their agendas, might be overwhelming and conflicts arise. Because of the independence of the

parties, resolving these issues takes more effort than they internally would. Additionally, differentiating oneself can be highly demanding as multiple partners offer the same solution in the same market with only minor differences to one another. (Vendor Business Owner, VAR Company #2)

End-customers

For the end-customers, there is no one-size-fits-all answer as the customer experience of the ecosystem business usually changes according to their position in the eyes of the vendor. For this reason, I will discuss both key customer segment, also known as “core market” that the vendors target themselves as well as the small and medium segment (SME), often also known as “non-core market” (Bech, 2015).

One of the primary benefits is that a technology solution’s true value can never be extracted without skillful consultants to carry out successful implementation. While the vendor usually provides implementation services themselves as well, they are often only available for most strategic customers globally. For customers of this status, as an experience, the ecosystem might not appear that much different than an entirely direct model would. The real difference can be seen in non-core markets, such as small markets like Finland. (Channel Manager, Vendor Company #1)

When it comes to implementation services, local partner companies whose livelihood depends on charging consulting hours, is often the better choice per industry best practices. In order to differentiate themselves, the partners come up with tailored approaches for niches present in the local markets, that would never attract the attention of the vendor itself. That is, especially if they represent the non-core market. This leads to a situation where the customers have multiple complementing products based on vendor technology they can access by engaging the partners who have developed them. Furthermore, as there are multiple partners, there are always other options if unhappiness with one partner occurs. Vendors rarely possess specialized competences in all their local country markets, but the partners must to justify their positions. Thus, the customers can access both products and competences even without physical vendor presence. (Channel Manager, Vendor Company #1)

The challenges that customers face also include implications from “bad team member” example described in chapter about vendors’ perspective. In case of a dysfunctional team, the customers’ benefit is also always at stake. If a customer’s preferred partner is protective and acts as gatekeeper, the relationship between that customer and the vendor might remain distant, making

it more difficult for the customer to get their voice heard. From time to time, this might also result from the vendor partner programs highlighting mostly hard metrics such as license sales, and not paying enough attention to softer metrics such as customer happiness and functional trinity.

5.1.4 Additional findings

During the interview process, also other interesting findings were uncovered. As the business model relies a lot on functional communication between the parties, some of the interviewees also elaborated on the ways the customers can get voice heard in the product development departments of the vendor, despite the organizational and geographical distance between. Product development is one of the aspects that can show a very different reality in the ecosystem model compared to direct model. Therefore, investigating it even further would be interesting.

Getting heard through the organizational and geographical distance

As this distance has grown along with the ecosystem itself, the vendors have attempted to come up with different ways of communication. For instance, there are customer portals where they can discuss, create enhancement ideas and vote which ideas are the best. This enables the vendors to spot the most popular ideas from the noise and adopt them to their development roadmaps if they will. These ideas can be created by anyone in the ecosystem, which supports the open innovation paradigm introduced in chapter 3.1.1. The customers can also create problem tickets, and their root causes are analyzed by technical support in order to create permanent fixes as opposed to one-time remedies. (Channel Manager, Vendor Company #1)

The vendors also organize product-specific conferences around the world, where customers can have rarely available face-to-face time with the product leaders. In these situations, they have a chance to get their voices heard directly, if their messages are strong enough. There are also round-tables, where customers of specific technologies gather to discuss with vendor's experts. In these situations, it is easy for the vendor to determine what the general customer experience in the field is, and what courses of actions they should take in product development. Many of these round tables are organized by user-groups. These are volunteer-based communities run by customers themselves. As they combine voices of multiple customers, they cannot be ignored by the vendors. If some customer expresses unhappiness in the user-group, many hear about it and significant damage can be done that is difficult to remedy. (Channel Manager, Vendor Company #1)

These conversations taking place in round-tables are rare opportunities and great for the customers to get their voices heard, but also require resources from the customer in forms of time and travel expenses. Therefore, the customers want to make sure that they get the best possible value out of these investments and thus craft their messages to the vendor well before presenting them. Some of the vendors even organize lab visits for customers, where product development is physically taking place. During these lab visits, the customers get a chance to peek at future product roadmaps and talk to people who at the end make the decisions that the customers wish to influence. Their preferred partners can also visit the labs along with the customers, to achieve a complete face-to-face conversation opportunity with the entire trinity's right stakeholders. There are also 3rd party research companies that interview CIOs of the customers and consolidate their feedback for the vendors to investigate. (Channel Manager, Vendor Company #1) (Project Manager, VAR Company #3)

Additionally, the vendors also run beta-customer programs. In these programs, customer access beta-applications that have not been officially launched yet, they are still under development. These customers have the need for this kind of solution, hence they are willing to invest time in co-developing the solution with the vendor to ensure it responds to their needs at the end. Beta-customer relationship takes a lot of effort, but the effort acts as payment for the solution at least partially. Hence, it can be a great way to get exactly what was needed without massive monetary investments out of pocket, simply by allocating employees for the co-development project. (Channel Manager, Vendor Company #1)

In the end, hearing the customer voice boils down to multiple factors. The companies in the scope of this thesis consist of even hundreds of thousands of employees. It might only take one of these with motivation to get a voice through the ecosystem to the right ears. Vice versa, it might only take one unmotivated person to block a crucial message with disastrous consequences. If one customer has a wish, it is not probably considered urgent by anyone and will most probably be forgotten rather soon. But what if, via functional communication, the vendor would realize that a thousand customers have the exact same wish? Maybe it would be worth investigating further, as it might unravel a future trend at the customers. Then the vendor could proactively react to this before the competitors do and gain competitive advantage as the first comer? This would without a doubt be something of interest among the vendor decision makers. (Channel Manager, Vendor Company #1)

The question is, how to discover these valuable messages from all the noise produced in the ecosystem, without investing unreasonably large efforts into this investigation? There have

been several suggestions in this thesis to get closer to this goal, discovered both from the literature and the interviews. However, the perfect way most probably still does not exist and leaves room for future research and innovation. Maybe big data mining tools that are becoming a more common reality as we speak, hold a key to this answer. The future will show us which vendors will be most successful in their efforts to respond to ever-changing customer requirements.

Recommendations for the case software ecosystem vendor

While many of the challenges surfaced in the interviews are easy to mention, but difficult to remedy due to their complexity and the large number of stakeholders, also concrete development ideas came up on how to improve the quality of the business. However, it should be mentioned that these are merely subjective observations and ideas of individuals, and thus are not proven to eventually have the desired effect.

As we are currently moving more and more from on-premise software to packaged cloud solutions, the income model changes along with the solutions. Previously the entire fee was paid upfront and the customer would install and basically own the solution from that point onwards, though certain rules regarding its usage would still apply. Whereas cloud software is a service the customer subscribes to and payments are monthly, quarterly or early. From time to time, the partner programs and compensation models did not seem to keep up, according to some of the interviewees. This caused some confusion and thus hindering the business. A suggestion to remedy the situation was to quickly clarify the rules regarding different technologies and reward smart choices, such as promoting new solutions that hold value for longer time periods over the old ones.

Another suggestion was to put more efforts into promoting healthy communication between the trinity parties. This communication should include both clarity of rules of engagement as highlighted before, as well as the reasoning behind the rules. Keeping up motivation to act a certain way in long-term is difficult, if the root cause for such behavior is not completely understood. Problems occur when details that should not be shared to protect vendor autonomy, such as end-user pricing, is shared. Perhaps the pricing models should not be as complex as they currently are then? This would increase the transparency in the ecosystem, which was rooted for by many of the interviewees. Fear of competitors accessing wrong information hinders the willingness for full transparency by the vendor. Better ways to work-around this should be developed to increase the cumulative wisdom of the ecosystem.

In addition to limiting the risk of competitors, another topic that somewhat contradicts with implications of the market economy, is a wish that the customers and vendor would always prioritize quality over the cheapest price option. Wrong priorities often lead to unwanted results from many perspectives. Developing a norm for operating and communication that always highlights the value over the price would be a desired state of future. Related to this, giving more emphasis from the vendor side to “soft metrics” discussed earlier such as customer satisfaction to product and service, would motivate the partners to increase the quality of their work even further.

5.2 Limitations of the study

This thesis is rather wide in scope resulting it to be somewhat high-level. Taking a more in-depth dive to any of the implications presented could have been interesting, but not feasible in the context of this thesis as the aim was to discuss the model itself on general level.

Many limitations of this study are also related to the fact that while my example companies are public and thus face multiple reporting duties, details of their success in the ecosystem business is not among of them. Since many details related to the ecosystem success are confidential, I had to highlight the publicity of this thesis to my interviewees. Thus, they were not able to disclose any business confidential facts in the interviews and had to stay high-level. They could discuss ways that things are supposed and attempted to be done, but not so much how successful the efforts have been. Meaning for instance, they were not allowed to discuss how often the hypothetical problems presented have actually occurred and what kind of damage, brand or otherwise has resulted. As result, the challenges presented in the empirical section are merely hypothetical than something they would have to deal with on a daily basis. The same data block applies to common literature of the topic as well.

For instance, there is not publicly available data regarding the percentages of software sales that happen indirectly through partners, as opposed to directly by the vendor itself. It would have been interesting to learn which global software giant does the largest share of their software sales indirectly and how far behind the other ones are. The only way this could be determined is by a collaborative study between the vendors, which they are most likely not willing to engage into, since they compete fiercely against each other and do not want to share such details with one another. For these reasons, my thesis focused on studying the ecosystem business phenomenon itself, as opposed to diving deep into comparing the different ecosystems

to one another. Therefore, this thesis does not help the reader to understand the differences between the ecosystems there are, just the principles and implications of the model itself.

5.3 Areas for future study

As mentioned in chapter about study limitations, lots of room for future studies exist in this space, both from academic and empirical viewpoints. Early stages and history behind the current ecosystem mentality was only introduced briefly, even though the path to today would have been an interesting area for study as such. Alternatively, the practical differences between the ecosystems we see in today's business landscape would be a highly interesting area for research. However, this would require accessing data that is not public, which might also cause confidentiality issues as discussed in the previous chapter.

The most common goals are listed in the literature review and referred to in the empirical section. Each one of these goals alone would make an interesting deep-dive. The financial goals were cutting and outsourcing cost as well as monetizing on the external sales resources. But which one of these financial goals is more important and plays a larger part in the bottom line? This thesis cannot answer this question with the data that was accessible. Especially since the ecosystem mentality does not seem to be going anywhere but vice versa expanding to new industries, there are bound to be a plethora of demand for further research. Finally, a more comprehensive study could be conducted by interviewing people from the end-customer organizations. I decided to rely solely on second-hand knowledge regarding the end-customer experiences, presented by interviewed partners who serve them directly.

5.4 Closing marks

Continuous growth in the utilization of ecosystem business model especially in the non-core markets is a trend that large software vendors are promoting in their business strategies. Significant part of the total revenue of these companies is comprised of channel sales through the partner network; established, global software vendors are willing to maintain only the largest and most profitable accounts by themselves and outsource most functions targeting the non-core markets to the ecosystem channel partners that they consider equipped with the best knowledge of the niche where that specific customer is operating in. This opens plethora of business opportunities for smaller players in the field with local knowledge.

In my research, I did not detect any reason that would possibly change the current trend, but rather vice versa. Even though the partners between the vendors and the customers get their

share of the revenues, considering the saved costs, mitigated risks and far deeper and wider market cover, it remains a highly profitable strategic move for the vendors. The companies that have managed to build functioning global software ecosystems are extremely hard to challenge for new players. After all, being a part of a certain ecosystem is voluntary, as everything should be in modern market economy. New vendors usually have nothing to offer for their potential partners in the beginning, making the market-entry hill very steep.

Due to the relatively rapidly developing nature of the software industry, accomplishing a stable market position and gaining stable revenues without the support of an ecosystem around the company can be considered extremely difficult, maybe even impossible. This does not mean that the future's winners would only be the large companies in the middle of their ecosystems, but they also enable smaller companies to reach clientele and revenues otherwise completely unreachable in the market dominated by global players. Without the formulation of global software ecosystems, only a minor portion of the huge market opportunities for software savvy companies nowadays would exist.

Software ecosystems enable every party in the ecosystem to profit from their existence, all the way until the end users. Even though in some business cases “cutting the middlemen” might be a smart move, it does not seem to apply in enterprise software business, when leveraged strategically. By leveraging channel sales as a sales strategy, the software vendors can reach markets and revenues unreachable with the capacities of their current in-house sales and service organizations. Rather than expanding their sales, account management and service delivery organizations to uncontrollable sizes, not to mention the amount geographical coverage required to be physically present in all the markets, outsourcing activities especially in non-core markets is indubitably a profitable move. This applied despite the shared immediate revenues from transactions. Additional benefits can also be harvested from product co-innovation opportunities and network effects enabled by the ecosystem partners.

In the software business, examples of completely self-standing “winners” are extremely difficult, if not even impossible to find. Without the ecosystem mentality, we probably would not have access to the broad range of high quality software products we use every day, such as mobile applications we use on our free time and enterprise applications we use at work. Without the ecosystem mentality, Microsoft, IBM, Oracle and SAP would probably not exist as global success stories like we know them today. The market would most probably look very different, consisting of more players with smaller portfolios and market shares. While it is difficult to argue if this reality would be better or worse for the world, the success of these companies

remains undisputed. Moreover, without these ecosystems, there might not be the success stories they have enabled to grow around them, such as “The Stars” like Company #3.

Finally, based on the fact that today’s winners in the enterprise software business appear to be determined by abilities to build and leverage partner ecosystems, I strongly believe that the winners of the future will be as well. In my opinion, the only real question remaining is if they will be same companies as they are today, or new ones that will eventually rise above and beyond. This remains to be seen.

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Interviews

<u>Organization number</u>	<u>Organization type</u>	<u>Position description</u>	<u>Length (min)</u>	<u>Interview type</u>
#1	Vendor	Channel Manager	74	Semi-structured
#2	VAR	Vendor Business Owner	40	Semi-structured
#3	VAR	Project Manager	48	Semi-structured
#4	VAD	Partner Manager	49	Semi-structured
#5	VAD	Partner Manager	20	Semi-structured
#6	Partner	Software Consultant	49	Semi-structured

Appendices

Appendix 1. Interview questions

- Brief description of your current position and steps leading to it?
- How do you see the business has developed to its current form?
- What are the positive implications of this model for your organization?
- What are the negative implications of this model for your organization?
- Why aren't these negativities being remedied?
- What are the positive implications of this model for the end-customers?
- What are the negative implications of this model for the end-customers?
- Why aren't these negativities being remedied?
- How would this arrangement work in a perfect world?
- Can you name a new entity that should be introduced to this model?
- Are there sometimes too many middle-men in this arrangement?
- What can the customer affect in this arrangement?
- Should the customer have more power in this arrangement?
- Does the vendor hear the customer voice loud enough in this arrangement?
- How should the product development work in this arrangement for best result?
- What prohibits the product development from working like this?
- Any other areas worth discussing that come to mind?